

**ADDIS ABABA UNIVERSITY  
SCHOOL OF COMMERCE**



**ASSESSMENT ON CHALLENGES OF PROJECT  
FINANCING:**

**A CASE STUDY ON COMMERCIAL BANK OF ETHIOPIA**

**A project work submitted to Addis Ababa University, School of  
Commerce in partial fulfillment of the requirements for the award of  
Master of Art Degree in Project Management**

**By:**

**Berhanu Kassahun**

**Supervised by:**

**Abdurazak Mohammed (PhD)**

**June 2017**

**Addis Ababa, Ethiopia**

## DECLARATION

I hereby declare that the work which is being presented in this project paper entitled “**Assessment on Challenges of Project Financing: a Case Study on Commercial Bank of Ethiopia**” is my original work, has not been presented for a degree in any other university and that all sources of material used for the thesis have been duly acknowledged.

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**Berhanu Kassahun**  
**June 2017**

### STATEMENT OF CERTIFICATION

This is to certify that Berhanu Kassahun has carried out his research work on the topic entitled “**Assessment on Challenges of Project Financing: a Case Study on Commercial Bank of Ethiopia**”. The work is original in nature and is suitable for submission for the award of Master Art Degree in Project Management.

Advisor: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**ADDIS ABABA UNIVERSITY  
SCHOOL OF COMMERCE**



**Assessment on Challenges of Project Financing:  
A Case Study on Commercial Bank of Ethiopia**

BY:  
Berhanu Kassahun

**APPROVED BY BOARD OF EXAMINERS:**

Abdurzak Mohammed (PhD)

-----  
Advisor

-----  
Signature

-----  
Date

Solomon Markos (PhD)

-----  
Internal Examiner

-----  
Signature

-----  
Date

Abraham (PhD)

-----  
External Examiner

-----  
Signature

-----  
Date

## **ACKNOWLEDGEMENT**

First of all, I would like to express my gratitude to the Almighty God, who has granted me the ability, opportunity and will to start and complete my study.

Mainly, I would like to thank my advisor, Abdurazak Mohammed (PhD) for his advice and constructive comments towards the preparation of this paper.

The gratitude also goes to my friend Birhan Eshetu for his comment and support in the preparation of this paper and class and team mates for their support and encouragement.

I extend my love and appreciation to my children (Nathan and Gelila) and my wife Bethelehem Ambachew for understanding me while not giving them the required time.

Finally, I want to send my thanks to staffs of Commercial Bank of Ethiopia especially Credit process in providing required data and information needed for the study.

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## ACRONYMS

CBE: Commercial Bank of Ethiopia

CPC: Central Processing Center

CPP: Credit Process Procedure

CRM: Customer Relationship Manager

CSA: Central Statistics Authority

DBE: Development Bank of Ethiopia

GTP: Growth and Transformation Plan

MIS: Management Information System

NBE: National Bank of Ethiopia

## **ABSTRACT**

*Capital as a requirement for economic growth is satisfied mainly by the development of financial sector in an economy. This research was undertaken with the objective of assessing the challenges of project financing in Commercial Bank of Ethiopia. To this end, the study employed quantitative and qualitative research approach; descriptive design to construct meaning from extracted data collected from primary and second sources through survey and document review. This was supplemented by available books, documents, published and unpublished thesis. Accordingly, the study came up with the findings that challenges CBE was facing in project financing emanate from three categories. The study, hence, concluded project financing challenges in CBE were external environment specific (data/information, financial intermediaries, economic & political environment and infrastructure), borrower specific (character of the borrower, nature of the project and management problem of the project promoter) and bank related (character of the bank, credit policy and procedure and credit appraisal & approval) in decreasing order of mean value of major category. From the reached conclusion in the study, it is recommended the bank and concerned parties should take respective actions to tackle the challenges timely.*

*Key words: Project financing challenges, Commercial Bank of Ethiopia*

# CHAPTER ONE: INTRODUCTION

## 1.1. Background of the Study

It is believed that the main factors affecting economic growth are labor, capital and exogenously determined technology. Capital as a requirement for economic growth is satisfied mainly by the development of financial sector in an economy. Gurley and Shaw (1955) and McKinnon (1973) argue that financial development can foster economic growth by rising saving, improving allocative efficiency of loanable funds, and promoting capital accumulation.

In due course, transforming liquid savings into illiquid assets that can fund long-term investment projects is one of the important functions of the financial system in financial development. Levine (1997) explains that the financial system plays a key role in preserving the liquidity of savings of individual savers while investing a portion of the funds into illiquid long-term projects. Historical evidence supports this claim. According to Hicks (1969), the capital market improvements that mitigated liquidity risks were the primary cause of England's industrial revolution as individual investors could hold liquid assets but at the same time the financial system transformed these liquid financial instruments into long-term capital investments. As England's industrial revolution required large commitments of capital for long periods, Levine (1997) goes as far as noting that the industrial revolution may not have occurred without this liquidity transformation.

Coming to our country Ethiopia, one of the developing nations in the world, the need for expanding investments in various sectors at small, medium and large scale level is found to be unquestionable in that it is being given great concern by the government. In Ethiopia, as in many developing countries, the growing demand of investment in agriculture, industry, construction, hotel and tourism, energy and transportation requires huge amount of funds to be invested. Reports indicate a growing demand of project loans at an increasing rate (Annual report, 2015). Though great concern has been given for small scale level industries, the relevance of giving the same concern to large business through time is essential. This is first because, flourishing probability of small scale industries is greatly supported by expanding large scale industries which absorb the products of numerous small businesses. Secondly, as the same author found

out, small business should grow and become large business to keep the healthy economic balance of the nation and forward the growth of the economy of the country.

In achieving the expansion of these businesses, the role of financial institution like banks is paramount and irreplaceable. Even though there were a number of banks in the nation that were supporting the investment activities, the largest and most outreaching bank that is significantly supporting the economy though providing financial resource in the form of loan is Commercial Bank of Ethiopia(CBE).

In line with the national planning, CBE is trying its level best in financing various investment projects (both government and commercial) that contribute to the development goal of the country. Hence, projects, as crucial building blocks of development, have to be financed provided that they were technically feasible, financially viable and environmental friendly.

According to CBE's lending procedure, project finance is a medium or long term loans intended for financing of the acquisition and/or leasing of fixed business assets, for the establishment of a new project and expansion of the existing business. The loan may embody initial working capital finance. (Credit Process Procedure Vol. I, 2013)

Therefore, this project paper tried to investigate what challenges of project financing CBE was facing.

### **Background of the Case Organization (CBE)**

CBE is the largest state owned bank in Ethiopia which has an asset of 305.1 billion Birr; more than 1thousand branches all over the country; and more than 30 thousand employees. It was established in 1942 and is pioneer to introduce modern banking in Ethiopia. CBE has strong correspondent relationship with more than 50 renowned foreign banks like Commerze Bank, Royal Bank of Canada, City Bank, HSBC Bank (Available at CBE website [www.cbe.portal](http://www.cbe.portal)).

**Table 1.1: Some data extracted from financial statement**

<b>End of June 30</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
Total Assets	74,230,727	114,645,19	158,804,429	195,443,220	244,127,812	305,074,840
Loans to Banks & F/Ins	262,316	243,310	487,717		388,142	460,590
Net Loans & Advances to customers	22,154,913	33,092,573	56,465,442	67,856,377	86,873,653	108,019,527
Gross Loans & Advances	22,599,077	33,974,506	57,839,554	69,726,182	89,277,040	110,962,576
Loans & adv including Bills , coupon and bonds	55,224,414	76,401,759	121,452,574	149,692,949	199,026,556	262,535,600
Total Deposits	54,677,664	88,430,668	116,584,459	153,987,300	192,964,473	241,668,215
Total Capital & Reserve	5,572,972	6,361,381	7,727,622	9,199,393	11,092,281	13,321,042
Provision for doubtful loans	444,164	881,933	1,374,112	1,869,805	2,403,387	2,943,049
Total Income	4,494,203	6,994,224	11,573,853	13,727,457	17,195,416	23,212,755
Interest Income	2,742,815	4,081,543	6,703,455	9,539,166	11,996,588	16,769,424
Non-Interest Income including F/CY gain (2014)	1,751,388	2,912,681	4,870,398	4,188,291	5,198,828	6,443,331
Profit after tax	1,968,670	2,863,518	5,434,144	5844086	6,684,503	8,770,097
No. of Branches	220	380	547	695	832	965
No. of Staff	8,726	10,753	12,782	15007	18524	22908
Number of customers in '000	2,210	2,762	3,893	6115	8187	10,573

*Source: NBE (Banks' Performance, 2015)*

From the table above, one can observe that CBE's total loan granted was increasing, from what was 55 billion in 2010 and escalated to 263 billion in 2015. So did its income from 4.5 billion to 23.2 billion for the same period. Generally, it had shown tremendous positive growth in all parameters not denying the proportionate increase in provision for doubtful loans (not trace passing the 3% barrier though).

## **1.2. Statement of the Problem**

Ethiopia's growth and transformation requires many projects in order to accomplish the vision the country envisioned. These projects again require finance from domestic as well as foreign loans. In this regard, CBE is one of the top financial institutions engaged in providing loans to the countries bankable projects. Projects, as crucial building blocks of development, have to be financed provided that they are technically feasible, financially viable and environmental friendly. However, there are various challenges in assuring these among which are availability of necessary data to support project appraisal and approval as well as either loan application that were not supported by feasible projects or challenges from external environment.

Generally, CBE's vision is to become a world-class commercial bank by 2025 while its mission is to maximize shareholder value through enhanced financial intermediation and unparalleled customer satisfaction through deploying highly motivated, skilled and disciplined employees capable of providing banking products and services that meet international best practices and standards among which project financing is one of the products.

Credit is one of the core services that CBE renders to its customers. Project financing is one of the lending decisions where by banks commit funds in return for future benefits. Lending decisions should be made on sound credit risk analysis/appraisal and assessment of credit worthiness of borrowers. The future is full of uncertainty and the benefits are forecasts that are not real making decisions to base on detail appraisal/investigation of facts and records.

Therefore, this project paper aimed at identifying challenges CBE is facing in its endeavor of meeting standards in project financing, thereby, forwarding appropriate recommendation to the concerned management of the Bank.

### **1.3. Research Questions**

In line with the problem statement, the research question that what addressed was what was the challenges that CBE was facing in project financing?

The Sub questions are:

- What are the major bank specific challenges that CBE face in project financing?
- What are the major borrowers' specific challenges that CBE face in project financing?
- What are the major external environment specific challenges that CBE face in project financing?

### **1.4. Objective of the Study**

#### **General Objective**

The general objective of the study was to assess how CBE is appraising investment financing requests and look in to the challenges associated with project financing.

#### **Specific Objectives**

The study tried to address the following specific objectives in due course:

- assess major bank specific challenges in project financing
- describe major borrowers' specific challenges
- Identify major external environment related challenges

## **1.5. Scope of the Study**

This study aimed at looking what challenges of project financing CBE was facing. As such, the study was delimited conceptually, geographically, methodologically and time wise.

Conceptually, the study assesses various challenges that affect the project financing of CBE such as bank related, borrower related and external environment related.

The geographical scope of the study focused on the project financing practices at CBE HQ Credit-CPC (Business & Corporate Customers Relationship Management, Commercial Customers Relationship Management and Credit Appraisal). The study did not incorporate the eleven districts found outside of Addis Ababa where project financing may also be undertaken. This was mainly because the head office CPC is the main one where big project financing requests were being handled due to presence of better expertise and loan approving limit set on districts. However, this did not mean that projects spread across the nation were not included, as districts were limited in approval limit and appeals cases of various districts were presented at Head Office Credit –CPC, they were, indeed, included.

Methodologically, the researcher employed quantitative and qualitative research approach; descriptive design to construct meaning from extracted data collected from primary (from only credit performers) and second sources through survey and document review. Statistical tools such as frequency distribution mean & standard deviation was applied.

Concerning time, the researcher used the time frame from 2011 up to 2016 to analyze the project loans approved in CBE.

## **1.6. Significance of the Study**

The significance of the study emanates from its objective and has the following significance.

- It helps the CBE management give insight to know the challenges related with the bank's project financing endeavor and take corrective actions timely.

- It helps the bank to use the recommendations for improving its service.
- The study will be an input for further study as it is assessment and touches large parts of credit project financing.
- The credit performers would be aware of the results of the study filling the gap by applying the recommendations and boost financing efficiency.
- It will inform interested readers as to how project financing is practiced in CBE.
- It will fulfill the requirement for the award of Master of Art Degree in Project Management for the undertaker.

### **1.7. Organization of the Study**

This project work report is organized into five chapters. The first chapter consists of background of the study, background of the organization under study, statement of the problem, research question, objective, significance, scope, and organization of the study. The second chapter discusses literature related to the study that contains different topics and sub-topics. The third chapter is about methodology of the study that contains data types and sources, sampling technique, sample size determination, method of data collection.

Chapter four is devoted to the analysis and presentation of the findings, interpretation the data, and related information. The fifth chapter winds up the assessment by giving summary and conclusions in the light of the findings and, at last, recommendations is made based on the concluded findings.

# **CHAPTER TWO: REVIEW OF RELATED LITERATURE**

## **2.1. Introduction**

Under this chapter, the available literatures on the area of the research-topic were reviewed. These literatures were obtained from books, journals, government reports and other dependable sources.

## **2.2. Theoretical Literature**

### **2.2.1. Project Definition, Types, Features & Contracts**

#### **Project Definition**

Various definitions of a project were given by different scholars of the field and hence some of them are discussed below.

Project Management Body of Knowledge (2013) defined project as a temporary endeavor undertaken to create a unique product, service, or result. Accordingly, the temporary nature of projects indicates that a project has a definite beginning and end while unique means that the product, service or result is different in distinguishing way from other products, services or results due to the different location, different design, different circumstances and situations, different stakeholders, and so on. Hence, a project should have definite starting and ending points (time), a budget (cost), a clearly defined scope or magnitude of work to be done, and specific performance requirements that must be met. Kerzner (2009) had given a similar definition for project. According to him, project can be considered to be any series of activities and tasks that have specific objective to be completed within certain specifications, defined start and end dates, funding limits (if applicable), consumed human and nonhuman resources (i.e., money, people, equipment) and are multifunctional (i.e., cut across several functional lines). Typically a project is a one-time effort to accomplish an explicit objective by a specific time. Unlike an organization's ongoing operations, a project must eventually come to a conclusion (Greer, 2001). This means that a project is done only one time. If it is repetitive, it's not a project.

#### **Project Types**

According to Chandra (2002), basically project can be identified based on their nature as follows.

- New project –is designed to establish a new productive process independent of previous line of production and financially independent of existing organization.
- Expansion project - expansion projects that involve repeating or expanding existing activities with the same output technology and organization.
- Updating projects – these projects that involve replacing or changing some elements in an existing activity without a major change of output. These involve some change in technology but within the context of an existing.

### **Project Features**

Projects have some common features that make them distinct from other types of financing types (Wynant, 1980):

- **Separate entity** - the borrower is usually a Special Purpose Vehicle (SPV) that is financially and legally independent from the sponsors.
- **Long term** - the tenor for project financings can reach 15 to 20 years.
- **Limited recourse/Non-recourse** - lenders usually have only limited recourse (or in rare cases, no recourse at all) to the sponsors. In strict terms, non-recourse financing is rare given that there is some (limited) recourse back to the borrower/sponsor beyond the assets that are being financed. For example, full or partial pre-completion guarantees and undertakings to cover cost overrun.
- **Non-recourse or limited recourse financing** - the project company is the borrower. Since these newly formed entities do not have their own credit or operating histories, it is necessary for lenders to focus on the specific project's cash flows. That is, “the financing is not primarily dependent on the credit support of the sponsors or the value of the physical assets involved.” Thus, it takes an entirely different credit evaluation or investment decision process to determine the potential risks and rewards of a project financing as opposed to a corporate financing.
- **Capital Intensive** - the amount of finance required for most infrastructure projects may run into several million US dollars.
- **Controlled dividend policy**- in more modern major corporate finance parlance, the project has a strictly controlled dividend policy, though there are exceptions because the dividends are subordinated to the loan payments. The project's income goes to servicing the debt, covering operating expenses and generating a return on the investors' equity. This

arrangement is usually contractually binding. Thus, the reinvestment decision is removed from management's hands.

- **Costly** - raising capital through project finance is generally more costly than through typical corporate finance avenues. The greater need for information, monitoring and contractual agreements increases the transaction costs.
- **Higher Risk** - projects by their very nature are risky financing types with related to their amount, long period of their payment period and the arrangement of payment of the loan. It is put in the form of formula as shown below.

### **Project Contracts**

Project contracts are entered between the project company and the parties interested in the project. The contractor's obligations are frequently bonded by surety companies or banks. The project sponsors may give a completion guarantee to the project company, guaranteeing that completion will take place at a certain date. There may also be equipment supply contracts whereby manufacturers agree to supply the equipment for the project. A long-term sales and purchase agreements may be entered into between the project company and the purchasers. Here, the purchasers (who often may be project sponsors) agree to buy the entire project's production, or a certain portion of it (Rauner, 1983).

The project lenders' objective of controlling the project company can be achieved contractually by including various forms of covenants in the project loan agreement. In broad terms, a covenant in loan agreement can be defined as an undertaking in which the corporate borrower agrees to maintain specified economic and operational factors during the term of the loan. Covenants bind the borrower in the conduct of its business during the period of commitment and for the duration of the loan. The essence of the covenant, as a contractual controlling and monitoring device, is that the breach of a covenant is frequently determined as an event of default in the loan agreement

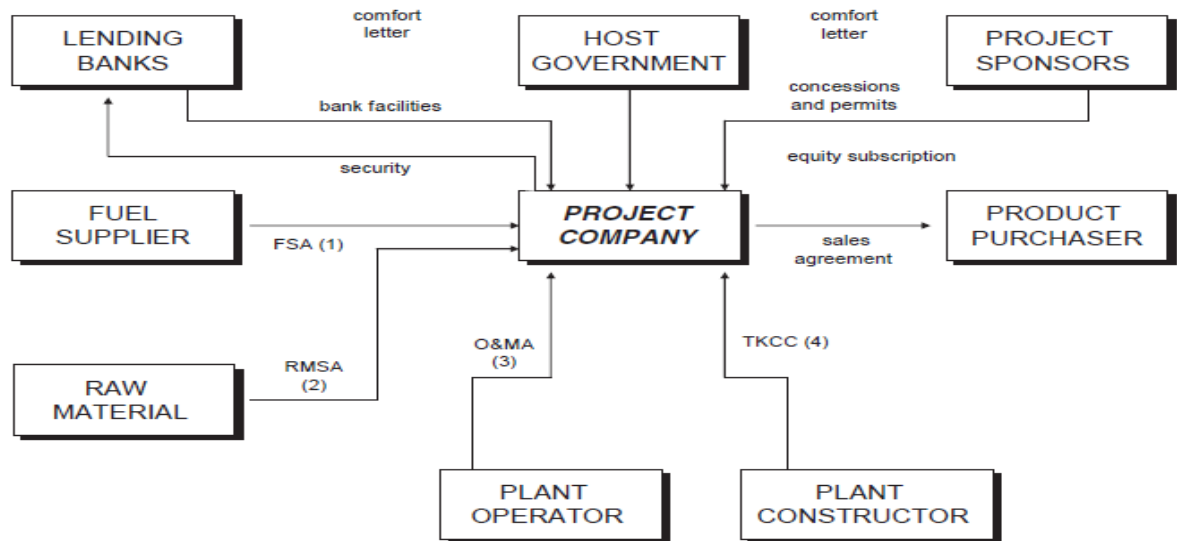


Figure 2.1: Stakeholders in Project Finance (Adapted from *Project Management in Theory & Practice* by Stefano Gatti 2008)

## 2.2.2. Project Financing

### 2.2.2.1. Project Financing Definition, Types, Features & Participant

#### Project Financing Definition

Project financing involves the creation of a largely independent project company financed with non-recourse debt (and equity from one or more sponsors) for the purpose of financing a single purpose, industrial asset (Esty, 2004). Project financing is the financing of a particular economic unit in which a lender is satisfied to look initially to the cash flow and earnings of that economic unit as the source of funds from which a loan will be repaid and the assets of the economic unit as collateral for the loan (Nevitt and Fabozzi, 2000). One of the most "official" definition of project financing has been given in the US by the Financial Accounting Standards Board (FASB), states that the financing of a major capital project in which the lender looks principally to the cash flows and earnings of the project as the source of funds for repayment and to the assets of the project as collateral for the loan. The general credit of the project is usually not a significant factor, either because the entity is a corporation without other assets or because the financing is without direct recourse to the owner(s) of the entity. Brealey, Cooper, and Habib (1996) also stressed that one of the key comparative advantages of project finance is that it allows the allocation of specific project risks to those parties best able to manage them.

Although there is no strict definition of "project financing", the concept itself is well established. The essence of project financing is its focus on the project which is being financed. The lender looks, wholly or mainly, to the project as the source of repayment; its cash flows and assets, where appropriate, are dedicated to service the project loan. The majority of authors agree on defining project finance as financing that as a priority does not depend on the soundness and creditworthiness of the sponsors, namely, parties proposing the business idea to launch the project. Approval does not even depend on the value of assets sponsors are willing to make available to financiers as collateral. Instead, it is basically a function of the project's ability to repay the debt contracted and remunerate capital invested at a rate consistent with the degree of risk inherent in the venture concerned.

### **Types of Project Financing**

#### **▪ Pure Project Financing**

In pure project financing the project loan is the sole source of credit finance for the project, and is repaid only from the cash flows and the assets of the project company (Donaldson ed. 1992) As to the debt repayment, pure project financing is equivalent to the concept of non-recourse financing. Completely non-recourse financings, however, in which the lenders look exclusively to the cash flow and the assets of the project, and in which they have no other form of external credit support for the debt repayment, are relatively rare (McKechnie, 1987).

#### **▪ Partial (Or qualified) Project Financing**

The more typical project financing falls in the category of partial (or qualified) project financing. Like in pure project financing, the lender's risk here remains to a great extent in the project, but the repayment of the loan no longer depends solely on the project's assets and cash flows. Partial project financing is equivalent to the concept of limited recourse financing. Here, the lenders have the benefit of some form of support from outside the project. In other words, the project lenders have direct or indirect recourse – predefined and limited in the financing documents - to the project's sponsor(s) and/or other third parties interested in the project in question (McKechnie, 1987).

### **Project Financing Features**

The following five points are the distinctive features of project financing according to Gatti (2008);

The debtor is a project company set up on an ad hoc basis that is financially and legally independent from the sponsors.

Lenders have only **limited recourse** (or in some cases no recourse at all) to the sponsors after the project is completed. The sponsors' involvement in the deal is, in fact, limited in terms of time (generally during the setup to start-up period), amount (they can be called on for equity injections if certain economic-financial tests prove unsatisfactory), and quality (managing the system efficiently and ensuring certain performance levels). This means that risks associated with the deal must be assessed in a different way than risks concerning companies already in operation.

**Project risks** are allocated equitably between all parties involved in the transaction, with the objective of assigning risks to the contractual counterparties best able to control and manage them.

**Cash flows generated** by the SPV must be sufficient to cover payments for operating costs and to service the debt in terms of principal repayment and interest. Because the priority use of cash flow is to fund operating costs and to service the debt, only residual funds after the latter are covered can be used to pay dividends to sponsors.

**Collateral** is given by the sponsors to lenders as security for receipts and assets tied up in managing the project.

### **Project Financing Participants**

Chandra (2001) stated that there are different participants involved in the project financing;

- **Government** - this participant is responsible for creating an enabling environment for project finance transactions through its legal system and other associated legislation (e.g. agreements, permits, property rights etc).
- **Equity Funders** - these are the owners of the project company and contribute the riskiest portion of the total funding of the project (equity). Their contribution is usually in the order of 40 to 50 percent, as a proportion of the total funding.
- **Nonrecourse Debt Funders** - these are the providers of long-term loans to the transaction. They usually contribute about 60 to 70 percent of the total funding of the

transaction. These are usually commercial banks, development finance institutions, multilateral, bilateral and export credit agencies.

- **Operator** - this is usually the firm that is in control of the construction and operations/management of the project (e.g. power plant).
- **Construction/Engineering Consultants** - this is the company responsible for the engineering, procurement and construction.
- **Equipment Supplier** - this is the selected manufacturer of the key equipment to be used during construction of the project.
- **Environmental Impact Assessment (EIA) Consultant** - this is the specialist who assesses whether the project meets the minimum standards of both national and international environment related legislation and agreements.
- **Affected Communities** - these are important stake holders who are directly or indirectly affected by the project.

#### **2.2.2.2. Project Finance Vs Corporate Finance**

A sponsor can choose to finance a new project using two alternatives: either the new initiative is financed on balance sheet (corporate financing) or the new project is incorporated into a newly created economic entity, the SPV, and financed off balance sheet (project financing). One major drawback of the later alternative is that structuring and organizing such a deal is actually much more costly than the corporate financing option. The small amount of evidence available on the subject shows an average incidence of transaction costs on the total investment of around 5–10%. There are several different reasons for these high costs (Gatti, 2008). First, the legal, technical, and insurance advisors of the sponsors and the loan arranger need a great deal of time to evaluate the project and negotiate the contract terms to be included in the documentation. Second, the cost of monitoring the project in process is very high. Lastly, lenders are expected to be paid significant costs in exchange for taking on greater risks.

On the other hand, although project finance does not offer a cost advantage, there are definitely other benefits as compared to corporate financing. These are:

- Project finance allows for a high level of risk allocation among participants in the transaction. Therefore, the deal can support a debt-to-equity ratio that could not otherwise be attained.
- From the accounting standpoint, contracts between sponsors and SPVs are essentially comparable to commercial guarantees.
- Corporate-based financing can always count on guarantees constituted by personal assets of the sponsor, which are different from those utilized for the investment project. In project finance deals, the loans only collateral refers to assets that serve to carry out the initiative; the result is advantageous for sponsors since their assets can be used as collateral in case further recourse for funding is needed.
- Creating a project company makes it possible to isolate the sponsors almost completely from events involving the project if financing is done on a no recourse (or more often a limited-recourse) basis. This is often a decisive point, since corporate financing could instead have negative repercussions on riskiness (therefore cost of capital) for the investor firm if the project does not make a profit or fails completely.

**Table 2.1: Main Differences between Corporate Financing and Project Financing**

Factor	Corporate Financing	Project Financing
Guarantees for financing	Assets of the borrower (already-in-place firms)	Project assets
Effect on financial elasticity	Reduction of financial elasticity for the borrower	No or heavily reduced effect for sponsors
Accounting treatment	On balance sheet	Off-balance sheet (the only effect will be either disbursement to subscribe equity in the SPV or for subordinated loans)
Main variables underlying the granting of financing	Customer relations, Solidity of balance sheet, Profitability	Future cash flows
Degree of leverage utilizable	Depends on effects on borrower's balance sheet	Depends on cash flows generated

*Source: Project Finance Theory and Practice (Gatti, 2008)*

### **2.2.2.3. Project Finance as Alternative to Financial Market**

There are five main functions of a financial market which project financing can do. These are (1) ex-ante information production and the efficient allocation of capital, (2) ex-post monitoring of investments and enforcing corporate governance, (3) the facilitation of diversification and the

management of risk, (4) the mobilization and pooling of savings, and (5) the facilitation of transactions (Levine, 1997). If markets are underdeveloped and do not function well in these areas the transaction costs of capital increase.

A prime function of financial intermediaries, such as banks, is that of monitoring borrowers. As Diamond (1984) argues, intermediaries have economies of scale in obtaining information. Intermediaries may also have greater incentives to use the collected information to discipline borrowers than small investors subject to free-rider problems. By collecting information, monitoring borrowers and exerting corporate control, a developed banking sector can facilitate access to external finance and especially long term finance, particularly among smaller firms which have limited access to alternative means of financing due to information costs.

Large stock markets provide opportunities for diversification by entrepreneurs. Thus, in countries with developed stock markets there may be an incentive for firms to substitute from long-term debt to equity. However, stock markets also transmit information that is useful to creditors. Prices quoted in financial markets at least partially reveal information that more informed investors possess, as demonstrated by Grossman (1976) and Grossman and Stieglitz (1980). This revelation of information may make lending to a publicly quoted firm less risky. As a result, the existence of active stock markets may increase the ability of firms to obtain long-term credit

Governments seek to increase the availability and use of long term debt which they think may be undersupplied due to informational costs, enforcement problems and financial market imperfections- through adopting policies that direct or subsidize long-term financing to favored firms or sectors. Directed credit policies include preferential discount lines from the central bank, portfolio restrictions on private commercial banks, guaranteed credit for public enterprises, and credit lines through development banks.

#### **2.2.2.4. The Role of Financial Intermediaries in Project Finance**

Services offered for project finance deals by financial intermediaries fall into one of two major categories: advisory services or financing services. The first category includes soft services used to define the risk profile for a deal, its time schedule, and its size in order to make it bankable, that is, to model the deal so that it can be proposed to potential lenders. Because such services

don't require huge amounts of capital, they can be provided by parties not represented by financial intermediaries: consulting firms, auditing firms, large-scale constructors, engineering firms, and individual professionals who often play an important role in terms of consultancy for structuring deals.

The second category of services concerns lending activities and consists of granting loans and, sometimes, providing equity based on indications in the feasibility study prepared by consultants. Because this activity requires the availability of capital, clearly it is a business area in which financial intermediaries—particularly commercial banks—play a leading role.

### **Feasibility Study Appraisal**

Project appraisal can be defined as a comprehensive and systematic assessment of the viability of a project from different aspects. It aims at serving as a guide to the decision-maker in the selection/rejection of projects from among competing alternatives for investment proposals. The various aspects of a project which a decision-maker must consider include technical, commercial, financial, institutional and economic aspects. An analysis of the economic aspect, or economic appraisal, assesses the desirability of an investment proposal in terms of its effects on the economy as a whole. Economic appraisal requires identification, quantification, and valuation of the correct costs and benefits of projects. Shadow prices are used to evaluate all inputs and outputs and externalities are taken into account. Application of the technique of cost-benefit analysis helps to determine project profitability (Sahibzada et al, 1985).

Before implementing a new project or undertaking expansion, diversification, modernization or rehabilitation scheme ascertaining the cost of the project and the means of finance is one of the most important considerations. For this purpose the company has to prepare a feasibility study covering various aspects of the projects including its costs and means of finance. It enables the company to anticipate the problem likely to encounter in the execution of the project and places it in a better position to respond to all the queries that may be raised by the financial institutions and others concerned with the projects. An appraisal report on the feasibility study is essential before a decision for setting-up any project and according to Chandra (2001) appraisal report must include the following:

### **A. Technical Feasibility**

All the factors relating to infrastructure needs, technology, availability of machine, material etc. are required to be scrutinized. Factors that are covered under this aspect include:

- Availability of basic infrastructure- It includes the land and its location as per present and future needs, lay out and building plan including finalization of structure, availability of water and power, availability of cheap labor in abundant supply.
- Licensing/ registration requirements
- Selection of technology/ technical process
- Availability of suitable machinery/raw material/ skilled labor etc.

### **B. Managerial Competence**

The ultimate success of even well conceived and viable project may depend on how competently it is managed. The promoters of the project have to provide necessary leadership and their qualification, experience and track record will be closely examined by lending institution.

### **C. Commercial Viability**

Any project can be commercially viable only if it is able to sell its product at profit. For this purpose it would be necessary to study demand and supply pattern of that particular product to determine its marketability.

### **D. Financial Viability**

Factors need to consider for financial viability are:

#### **i. Cost of project:**

A realistic assessment of cost of project is necessary to determine the source for its availability and to properly evaluate the financial viability of the projects. Cost of a project includes but not limited to land acquisition cost, site development cost, buildings cost, plant and machinery, miscellaneous fixed assets, preliminary expenses, contingencies and margin for working capital.

#### **ii. Means of Finance:**

After estimation of the cost of the project, the next step is to find out the source of funds. The means of financing will include: issue of share capital including ordinary/preference shares, issue of secured debentures, secured long-term and medium-term loans, unsecured loans and deposits

from promoters, directors etc, deferred payments and capital subsidy from Central/State Government.

### **iii. Security Coverage and Promoters Contribution**

Bankers want that at least the promoters should contribute 40% of the total project cost. The long term sources of funds are utilized for acquisition of land, procuring the fixed assets and construction of building etc. But for working capital, the project require short term loan. Hence, the financing for a project is the mix of both long term and short term loans.

### **iv. Profitability Analysis**

After determining the cost of the project and means of financing, the viability of the project depends on its capacity to earn profits to service the debts and capital. To undertake the profitability analysis, it is necessary to draw estimates of the cost of production and working results. These estimates are made for a period which should at least cover the moratorium and repayment periods.

### **v. Projected Balance Sheet, Profit and Loss Account and Projected Cash Flow:**

The projected financials of the project is prepared for the entire tenure as estimated above.

### **vi. Break-Even Point:**

Estimations of working results pre-suppose a definite level of production and sales and all calculations are based on that level. The minimum level of production and sales at which the unit will run on “no profit no loss” is known as break-even point and the first goal of any project would be to reach that level. The break-even point can be expressed in terms of volume of production or as a percentage of plant capacity utilization. Break-even in terms of volume of production is equal to total fixed cost/ contribution per unit.

### **vii. Debt Service Coverage Ratio (DSCR):**

Debt Service Coverage Ratio is calculated to find out the capacity of the project servicing its debt i.e. in repayment of the term loan borrowings and interest. The higher D.S.C.R. would impart intrinsic strength to the project to repay its term borrowings and interest as per the schedule even if some of the projections are not fully realized. Normally a minimum D.S.C.R. of 2:1 is insisted upon by the term lending institutions and repayment is fixed on that basis.

### **viii. Sensitivity Analysis:**

While evaluating profitability projections, the sensitivity analysis may be carried in relation to changes in the sale price and raw material costs, i.e. sale price may reduce by 5% to 10% and raw material costs may be increased by 5% to 10% and the impact of these changes on DSCR shall be analyzed. If the new DSCR, so calculated after changes, still proves that the project is viable, the financial institution may go ahead in funding the project.

### **ix. Internal Rate of Return:**

This is an indicator of earning capacity of the project and a higher IRR indicates better prospects for the project. The present investment in the cash flow which is assumed to be negative cash flow and the return (cash inflow) are assumed to be positive cash flows. Normally bankers want that internal rate of return should be at least 18% because it depicts the strength of the project and its earning and repayment capacity at the same time. Better the IRR better rating to the project.

### **E. Environmental, Political and Economic Viability**

The performance of the project is also influenced by the external factors also such as existing government policies regarding particular sector, easiness in getting the license to operate in a particular region or state, effects of the project on the environment, tax exemptions for particular region etc. Hence, while compiling the project report, it is important to study the industry scenario; government policies etc and these should be covered in the project report.

#### **2.2.3. Project Risks**

##### **Project Phases & Risk**

Generally, the implementation of a project contains three phases. Focusing on the time dimension and on the project risks, these phases can be seen as distinct risk periods from the project lenders' perspective. When analyzing the risks, the project planners distinguish between the construction phase and the operational phase of the project (Rendell and Niehuss, 1983).

**i. Preparation or planning phase** - the feasibility and the engineering studies of the project are undertaken and completed. Moreover, the project contracts between the parties interested in the project are negotiated. The costs of this phase are normally financed by the equity of the

sponsors or by loans fully guaranteed by them (Harries, 1989). Thus, the planning phase does not usually involve major risks for project lenders.

**ii. Construction or pre-completion phase** - the project loan will be disbursed and the construction of the project will begin. The construction phase covers the project before it is complete and able to produce its end product. In this phase, the project is absorbing finances, but does not generate any income. The lenders will usually allow a grace period for repayment. The construction phase is the period of the highest risks for project lenders. Completion of a project will mark the end of the construction phase and the beginning of the operational phase (Chance, 1995).

**iii. Operational phase** - the project begins to produce goods or services, and - provided that the cash flow projections prove correct – generates enough revenues to cover the operational costs, the debt service for the project lenders, and the dividends for the shareholders (sponsors) of the project company. During the operational period, the long-term project loans are gradually repaid. Short-term project loans, however, might still occasionally be needed as working capital.

### **Main Categories of Project Risks**

Since project financing is primarily based on a project's revenue and assets to provide the source of debt repayment, the project lenders are concerned about developments that would interrupt a project's revenue stream or reduce the value of the project assets. Only if the project generates a cash flow sufficient to cover the operating costs and the debt service, the lender can expect to recoup the amounts lent and to gain adequate compensation for the credit risk it has assumed. Hence, the project lenders assume the same project risks as the equity investors (owners, shareholders) of the project, although this happens on a better risk level, because of their priority right to project assets as creditors. Another issue, however, is that the project lenders frequently do not accept all the project risks to be carried on their own, but require contractual obligations to carry certain risks of other parties to the project ( Rendell and Niehuss, 1983). Thus, the following categories are made in order to present a general description of the causes and effects of the project risks.

**Completion risk** - The most extreme form of pre-completion risk is the possibility that the construction of the project is never completed. As a result, the project never generates any revenue, and the project company is unable to repay its debts to the project lenders. Less extreme forms of pre-completion risks are delays which threaten the viability of the project, or cost overruns which can be caused partly by delays. The materialization of these risks increases the need for finance to complete the project, making it less likely that the future revenues of the project company can service the debt in full (McCormick, Freshfields, 1992).

**Operational risk** - The precise form of operational risk depends on the nature of the project. As to operational risk, the question is, in short, whether or not the project can successfully produce its end-product (goods or services). The operational phase risks may include e.g. inadequacy of power, water or raw material supply, continued unavailability of qualified managerial personnel, or technical difficulties.

**Market risk** - Like operational risk, the market risk may be materialized after the project is completed and its operation commenced. The market risk covers both supplies to the project and sales by the project. The supply risk is crucial where a project is dependent on its ability to purchase raw materials and/or energy at a certain price, in order to produce its product at sufficiently low costs. The other critical question is whether the project company can sell its production at a competitive price, covering both operational costs and debt service. The price fluctuations of both supply and sales markets can adversely affect the debt repayment ability of the project company (Harries, 1989).

**Political and regulatory risk** - The major political risks endangering the project are expropriation of the project by the project's host country, governmental interference with the project's operations (ranging from excessive or unreasonable changes in laws relating to taxation, import duties, labor, local supply, nationalization of the project company's management, or environmental protection), war or civil disturbance threatening the construction or operation of the project, and blockage of foreign currency remittance (i.e. the risk that the funds earned by the project cannot be converted into currency required for the debt service and transferred outside the project's host country) (Rendell and Niehuss, 1989).

Therefore, risks must be identified in order to ascertain the impact they have on a project's cash flows and must be allocated to create an efficient incentivizing tool for the parties involved. If a project participant takes on a risk that may affect performance adversely in terms of revenues or financing, this player will work to prevent the risk from occurring. From this perspective, project finance can be seen as a system for distributing risk among the parties involved in a venture.

#### **2.2.4. Challenges of Project Financing & Mitigation Strategies**

##### **Challenges of Project Financing**

According to Ford (2006), whether you are a new project manager, or an experienced leader, project management will continue to reveal itself as part art, part science, and part major headache. Ford listed the following as some of the top project management challenges that can affect project financing in banks.

- 1. Unrealistic deadlines** - Some would argue that the majority of projects have "schedule slippage" as a standard feature rather than an irregularity. The challenge of many managers becomes to find alternate approaches to the tasks and schedules in order to complete a project "on time", or to get approval for slipping dates out. An "absolute" time-based deadline such as a government election, externally-scheduled event, or public holiday forces an on-time completion (though perhaps not with 100% of desired deliverables). But, most project timelines do eventually slip due to faulty initial deadlines.
- 2. Communication deficit** - Many project managers and team members do not provide enough information to enough people, along with the lack of an infrastructure or culture for good communication.
- 3. Scope changes** - As most project managers know, an evil opponent "The Scope Creep" is usually their number one enemy who continually tries to take control.
- 4. Resource competition** - Projects usually compete for resources (people, money, time) against other projects and initiatives, putting the project manager in the position of being in competition.
- 5. Uncertain dependencies** - As the project manager and the team determine project dependencies, assessing the risk or reliability behind these linkages usually involves trusting someone else's assessment.

6. **Failure to manage risk** - A project plan has included in it some risks, simply listed, but no further review happens unless instigated by an event later on.
7. **Insufficient team skills** - The team members for many projects are assigned based on their availability, and some people assigned may be too proud or simply not knowledgeable enough to tell the manager that they are not trained for all of their assigned work.
8. **Lack of accountability** - The project participants and related players are not held accountable for their results - or lack of achieving all of them.
9. **Customers and end-users are not engaged during the project** - Project teams can get wound up in their own world of internal deliverables, deadlines, and process and the people on the outside do not get to give added input during the critical phases.
10. **Vision and goals not well-defined** - The goals of the project (and the reasons for doing it), along with the sub-projects or major tasks involved, are not always clearly defined. Clearly communicating these vague goals to the project participants becomes an impossible task.

### **Mitigation Strategies of Project Financing Challenges**

Ford (2006) has also put some solutions for the above ten stated challenges of project financing that arise from the side of project promoters.

- i. **Some solutions and ideas to thrash vagueness:** Determine which parts of a project are not understood by the team and other project participants - ask them or note feedback and questions that come up. Check the project documentation as prepared, and tighten up the stated objectives and goals - an editor has appropriate skills to find vague terms and phrasing. Each project is, hopefully, tied into to the direction, strategic goals, and vision for the whole organization, as part of the portfolio of projects for the organization.
- ii. **Solution for Communication deficit:** Determine proper communication flows for project members and develop a checklist of what information (reports, status, etc.) needs to be conveyed to project participants. The communications checklist should also have an associated schedule for the information to be disseminated.
- iii. **Solution for Scope changes:** There is no anti-scope-creep spray in our PM utility belts, but as with many project management challenges, document what is happening or anticipated to happen. Communicate what is being requested, the challenges related to these changes, and

the alternate plans, if any, to the project participants (stakeholders, team, management, and others).

- iv. **Solution for the Challenge of Resource Competition:** Portfolio Management - ask upper level management to define and set project priority across all projects. Also realize that some projects seemingly are more important only due to the importance and political clout of the project manager and these may not be aligned with the organization's goals and objectives.
- v. **Solution for Uncertain Dependencies:** Have several people- use brainstorming sessions - pick at the plan elements and dependencies, doing "what if?" scenarios. Update the list of project risk items if necessary based on the results.
- vi. **Solution for Failure to Manage risk:** Once a project team has assessed risks, they can either (1) act to reduce the chance of the risk occurrence or (2) act or plan towards responding to the risk occurrence after it happens.
- vii. **Solution for the Challenge of Insufficient Team Skills:** Starting with the project manager role, document the core set of skills needed to accomplish the expected workload, and honestly bounce each person's skills against the list or matrix. Using this assessment of the team, guide the team towards competency with training, cross-training, additional resources, external advisors, and other methods to close the skills gap.
- viii. **Solution for the challenge of Lack of accountability:** Determine and use accountability as part of the project risk profile. These accountability risks will be then be identified and managed in a more visible manner.
- ix. **Solution for the challenge that Customers and end-users are not engaged during the project:** Discuss and provide status updates to all project participants - keep them informed! Invite (and encourage) stakeholders, customers, end-users, and others to periodic status briefings, and provide an update to those that did not attend.
- x. **Solution for the challenge that Vision and goals not well-defined:** Manage the stress of "the immovable rock and the irresistible force" (i.e. the project deadline and the project issues) with creative planning, alternatives analysis, and communication of reality to the project

participants. Also determine what deadlines are tied to higher level objectives, or have critical links into schedules of other projects in the organization's portfolio.

## **2.3. Empirical Literature**

### **2.3.1. Studies in Other Countries Context**

#### **Challenges**

In the following section Project Finance Challenges for Indian Solar Power- Deepto Roy is discussed as stated by Indian biomass magazine (2010).

The Government of India has, in the last two years, been concentrating on solar power, apparently apanacea for the ever-growing demand-supply gap in power generation. Significant policy steps have been initiated through the ambitious Jawaharlal Nehru National Solar Mission (“the JNSSM”), with the mandate of adding a mind-boggling twenty gigawatts of solar power (at an investment of Rupees Ninety thousand crores) by 2020.

Since solar power is much more expensive – even compared to other forms of renewable energy – with capital expenditure required in the region of Rupees Fourteen to Sixteen crores per megawatt (“MW”), the JNSMM follows a unique model of ‘bundling’ solar units with cheaper thermal power from the unallocated capacity of central power plants. The allotment of thermal power from central power stations is in high demand in states that have power shortage, and therefore, access to this thermal power provided the incentive necessary for these states to purchase the bundled solar power as well. The nodal agency for power purchase is NTPC Vidyut Vyapar Nigam Limited (“the NVVN”), a wholly owned subsidiary of the National Thermal Power Corporation (“the NTPC”).

Project finance is challenging for solar projects for a variety of reasons.

#### **a. Hyper-competition and unsustainable tariffs**

For the JNNSM bids, developers were required to provide a discount over the CERC feed-in tariff. This resulted in some unbelievable bids, with bidders offering discounts up to fifty per cent. From a financial perspective, these tariffs are simply unsustainable.

### **b. Lack of scale**

Under the JNSSM, no single developer can develop projects with total capacity in excess of five MW to allow a larger number of developers to participate. However, this restricts developers from leveraging scale. In an industry where the typical plant load factor (“PLF”) is very low, larger projects have a much lower risk profile.

### **c. Uncertain technology, uncertain developers**

Solar technology is ever evolving. Since most Indian developers have no experience in developing or operating solar plants, their ability to integrate this technology is suspect. To top this, projects that have qualified in the initial phase of the JNSSM are required to implement their projects within remarkably stringent timelines, which may be impossible to implement.

### **d. Bankability’ of the NVVN’s PPA**

The NVVN’s standard Power Purchase Agreement (“PPA”) is not ‘bankable’ in many respects (bankability refers to the ability of a contract to ensure revenues to the developer, so that the bank can rely on it to finance the project). The key drawbacks are:

1. The lack of a ‘take or pay’ obligation on NVVN - that is, the obligation to make payments irrespective of whether the buyer actually purchases the power, thus shielding the developer from situations where the buyer fails to off-take the power.
2. The NVVN has no obligation to make payments to the developer in case a utility company fails to make payments to NVVN under their agreements with NVVN – that is, the entire payment risk is passed on to the developer, with NVVN only acting as a go-between.

This is highly unusual and creates significant doubts with respect to the project cash-flows. Indian state utilities, since the days of Dabhol, are infamous for not honoring contractual obligations and delaying payments. It was anticipated that NVVN, being a subsidiary of the AAA-rated NTPC, would be responsible for payments under the PPA as this significantly reduce this risk. This has not happened.

### **e. Lack of security**

In case of solar power, unlike conventional power, the project assets devalue rapidly and lenders do not have much confidence in their ability to sell the assets and recover the debt. Apart from

the project revenues, the lenders have no other recourse, since no direct government support (such as guarantees and shortfall undertakings) has been provided.

**f. Interconnection issues**

At present, the number of solar plants actually connected to the grid is laughably low, with the total capacity of all solar plants connected to the grid being fourteen MW only. Developers, particularly with plants in remote areas (say, the Thar desert in Rajasthan) will find interconnection a significant impediment, particularly since the national grid company, Power Grid Corporation of India Limited, consistently fails to implement their interconnection projects within projected timelines.

**g. Lack of lender confidence**

Indian lenders have never been comfortable financing renewable power on a project finance basis and this lack of confidence is hurting their solar lending capabilities as well. They have not developed the technical capability to assess the risks of a solar power project and are, understandably, hesitant to finance these projects.

Despite various issues, according to Indian biomass magazine (2010) is concentrated movement to make project finance accessible to solar power developers. The Ministry of Renewable Energy (“the MNRE”) has set up a group of public sector banks, under the leadership of the State Bank of India, to explore steps that are required – such as making more inexpensive funds available – to make solar projects more viable. Some solutions include banks issuing long-term tax-free bonds to fund solar projects, and credit guarantees to projects from the Indian Renewable Energy Development Agency (“the IREDA”).

The MNRE has also proposed budgetary support from the NVVN. This means that even if the utilities fail to make payments, the NVVN would still be able to pay the developers. This will significantly reduce the credit risk for the banks.

International development agencies, including the International Finance Corporation and the Asian Development Bank, have come out in support of renewable projects and are considering proposals to advance funds that can be used for on-lending or equity investments in renewable energy projects. Other international organizations and green funds are also expected to contribute. Another possibility is that projects would be funded on a balance sheet basis.

However, given the significant capital requirements, a robust solar sector will definitely require active project finance support.

As reported by LPC Dealscan, the use of project finance has grown dramatically over the years from \$12.5 billion (bn) per annum in 1991 to \$113.4 bn in 2005.<sup>1</sup> financing almost 4000 projects in 113 countries, the total amount of project finance raised between 1991 and 2005 amounts to \$1077 bn. While the US, with \$186.4 bn, accounts for most project finance (followed by Australia and the UK), this form of financing has also been used extensively in emerging economies: such as in Taiwan (\$64.2 bn), China (\$58.9 bn) and Malaysia (\$46.5 bn).

### **Project Financing Advantages**

Project finance can stop over-investment at the sponsor level. The need to raise external finance introduces a critical review of the project and its prospects can result in better capital allocation (Kensinger and Martin, 1988). Separate legal incorporation also segregates project cash flows thereby preventing inefficient investment or cross-subsidization of other divisions (Scharfstein, 1998; Scharfstein and Stein, 1998). Project finance is designed to reduce transaction costs, in particular those arising from a lack of information on possible investments and capital allocation, insufficient monitoring and enforcement of corporate governance, risk management, and the inability to mobilize and pool savings. Project finance is found to be a strong driver of economic growth in low-income countries where transaction costs are particularly high, but not in mid- or high-income countries where financial markets are more developed. Controlling for initial conditions and other economic factors, a move from the 25<sup>th</sup> to the 75<sup>th</sup> percentile in project finance will increase annually by 0.67 percentage points for low income countries according to S. Kleimeier, and R. Versteeg (2010).

Schumpeter (1911) pointed out finance stimulates growth not by creating more savings but rather by better allocating savings and stimulating technological innovation. As an evidence for this view is that a recent study by Hasan, Koetter and Wedow (2009), who measure the relative importance of the quality of finance and the quantity of finance in Europe. An increase in the efficiency (i.e. quality) of bank finance creates up to five times more growth than a corresponding increase in the quantity of bank finance.

In theory, financial markets can stimulate the quality of capital in several ways (Levine, 1997). Firstly, well-developed markets improve resource allocation and allow easier access to capital for entrepreneurs, thus lowering their financial constraints and financing costs (Boyd & Prescott, 1986; Tobin & Brainard, 1963). Secondly, financial markets play a vital role in corporate governance by dealing with agency costs and informational asymmetries (Bernanke & Gertler, 1989). Thirdly, markets facilitate the pooling and sharing of risks. Through financial markets, investors can diversify their portfolios and minimize idiosyncratic risk. In addition, markets allow not only for the insurance of liquidity risk through banks but even for intergenerational consumption smoothing through pension funds. Fourthly, markets mobilize and pool savings and fifthly, they ease the exchange of goods and services. By the same token, empirical evidence supports the view that financial markets stimulate economic growth. King and Levine (1993) show that economic growth increases as the financial system develops and deepens while Levine and Zervos (1996) document that larger and better developed stock markets contribute directly to economic growth.

Given the project's high leverage, business risk must be reduced to a feasible level. Here lies one of the key comparative advantages of project finance: it allows the allocation of specific project risks (i.e. completion and operating risk, revenue and price risk, and the risk of political interference or expropriation) to those parties best able to manage them (Brealey, Cooper, & Habib, 1996). Thus, project finance comprises not only financial arrangements dominated by non-recourse debt funded in the global syndicated loan market but also a large set of contractual arrangements aimed at risk management.

These specific characteristics of project finance enable it to substitute underdeveloped financial markets and emulate, in part, the desirable features of a well-developed market. Like any other type of finance, project finance is of course most successful in a transparent environment where contracts are respected, because adjusting the structure of project finance to deal with market failures will be costly and imperfect (Ahmed, 1999). However, the important point is that project finance still functions relatively well in the least developed countries (LDCs). Most other types of capital, such as FDI, are not very effective in substituting the market, making project finance an attractive choice for LDCs.

### **2.3.2. Studies in Ethiopian Context**

According to Shimelis (2015), in his study on manufacturing project financing by CBE, the major challenges of manufacturing project financing in CBE were low level of skill of credit performers, absence of quality and completeness of projects proposals submitted by customers, poor credit culture of customers of the bank, lack of properly trained consultants for project feasibility study and difficulty of preparation of project proposal by customers. In addition, he stresses that the absence of adequate data and information in CBE credit processing, lack of research unit to support credit process of the bank; less availability of data and up to date information with regard to the appraising process; lack of skilled employees to properly evaluate and appraise manufacturing project financing requests are also among the major one.

Not all projects that start their life continue to grow and stay for long. Some fail due to several reasons. According to Getachew (2011), when project analysis has failed to anticipate the outcome of a project investment, a common reason appears to have been simply poor preparation of the analysis. Practice, as the same author states, has shown that as a bitter consequence of poor project preparation too many industrial projects suffer in terms of low capacity utilization, heavy costs overruns, deteriorated financial profitability, overestimated returns, underestimated costs, omission of a necessary component, optimistic projection (Yield, date), failure to consider the variability of climate, and optimistic calendar for implementation.

In her study, the determinants of default in project finance, Fikirte (2015) pointed out that the major cause of project loan default are factors in connection with the character of the borrower and the management capacity problem from the side of the borrower, data or information constraint and inflation from the macro-level external environment, and monitoring and follow-up and appraisal related factors from the Bank side. On the other hand, Senay (2016), in the assessment of government priority project appraisal process study coincided with the above findings and further stated that the support of the research unit was very weak in providing a reliable data and information which is helping in manufacturing appraisal process; in holding and reserving various reliable data which helps for project appraisers for processing. He further stated that the bank has lack of a good relationship with external institution like Ministry of Trade, Ministry of Industry, and Central Statics Agency. Hence, one can draw conclusion that

the banks share the same problem that need to be addressed in collaboration with other bodies concerned.

## 2.4. Conceptual Framework

According to the literature reviewed project financing encounters various challenges. Some of which are lack of skill, project bankability, scope change, lack of lenders confidence, lack of scale, lack of accountability, insufficient skill to manage risk, political risk, vision and goals not well-defined, communication deficit, which can be categorized into three major categories in the context of CBE.

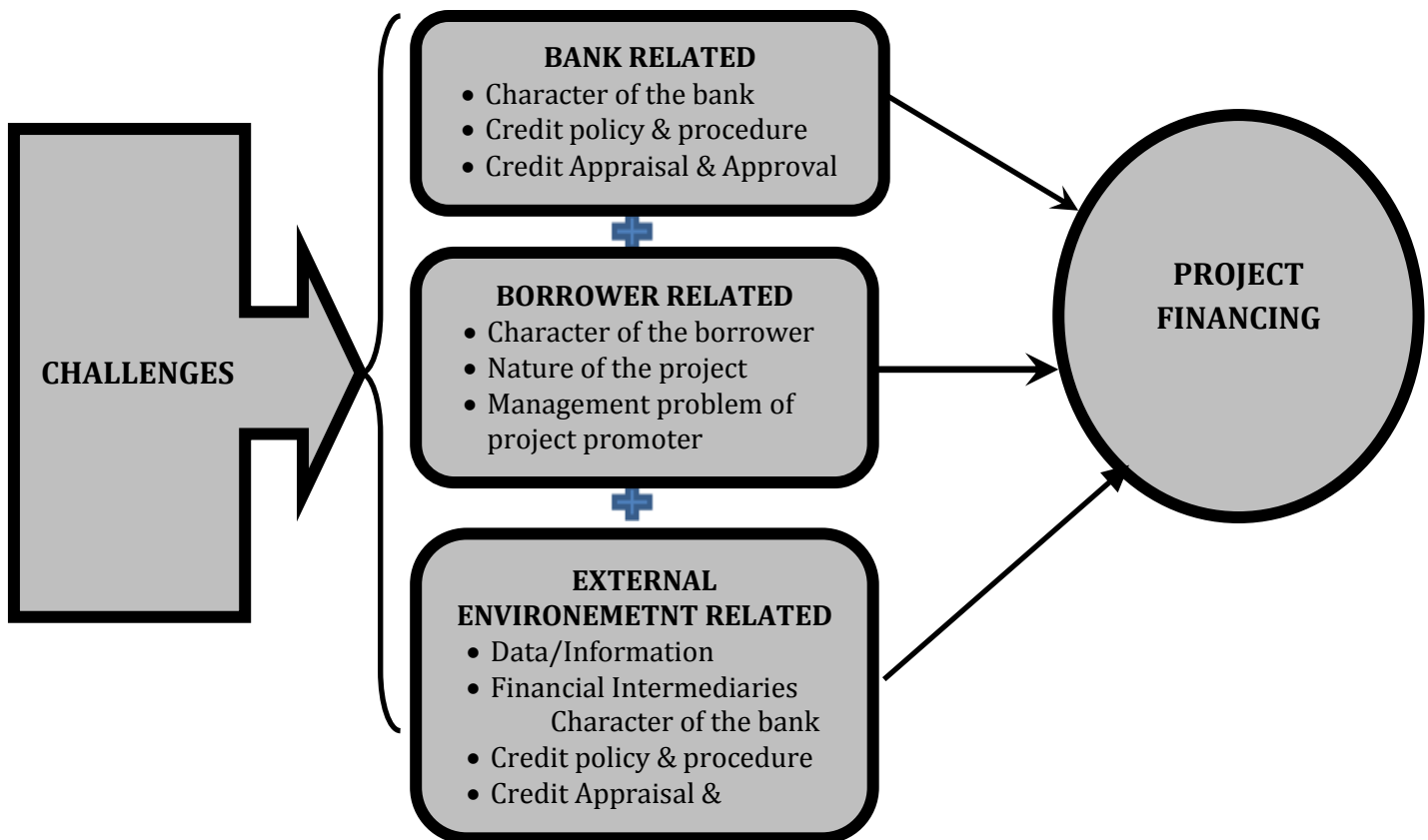


Figure 2.2: Conceptual Framework: Challenges Affecting Project Financing in CBE(self extracted, May 2017)

## **CHAPTER THREE: METHODOLOGY OF THE STUDY**

The objective of the study is assessing various challenges CBE is facing in its envious of Project Financing. To attain the objective of the study, the use of tools and methods is crucial. The following are different components of methodology of the study that were applied to conduct the study.

### **3.1. Data Types and Sources**

Both primary and secondary data were used in the study. The primary data was collected from credit performers of CBE through questionnaire. Secondary data was extracted from different printed sources like books, magazines, credit policy and procedure documents of the CBE and previous researches done on the area. Besides internet sources were utilized.

### **3.2. Research Approach**

Both quantitative and qualitative methods were employed. Since each of the two methods has its own strength and limitations, the research has adopted both methods to benefit from the strength and avoid/minimize the limitations arising from using a single method.

#### **3.2.1.The Quantitative Research Approach**

In order to assess what challenges CBE was facing in project financing, various categorized lists of factors affecting project financing were surveyed via structured questionnaire containing closed type of questions using Likert scale.

#### **3.2.2. The Qualitative Research Approach**

In order to obtain more insight than outlined in the questionnaire, in a less structured and more flexible approach a qualitative approach was used. Using this approach an interview was conducted on selected few respondents who have better experience in the bank as well as in project financing in addition to reviewing secondary data. However, qualitative method has a limitation because of the difficulty in generalizing findings to a large group as limited number of participants was involved in this approach.

### **3.3. The Population and Sampling**

**Target Population** are employees of CBE particularly in the credit process of the two wings- Credit Appraisal and Credit Management working at a capacity of Credit Analyst, Credit

Appraisal Expert, Customer Relationship Manager and the respective Directors. The total target population was 88.

**The Sampling Technique and Sample Size-** the sample techniques used in the study was non-probabilistic (purposive) sampling as the population was somehow homogeneous. Therefore, all of 33 performers (14 credit experts and 19 credit analysts) from the Credit Appraisal team and equal number i.e. 33 relationship managers from Credit Management team of 53 performers were considered. In addition to this, interview was held with Directors of Credit Appraisal and Credit Management. Hence, the sample size was 68 individuals which is 77% of the target population.

The matching of the sample size of the two wing and interviewing of the official of both wings was deliberately done in order to balance the responses of each wing so that no bias would occur as a result of higher respondent of either wing; in addition to the need for triangulating the performers' and management's views.

As seen below, the sample size chosen was 77% of the population.

**Table 3.1: Sample Size**

S.N.	Respondents	Population size	Sample Size	Sampling Technique	Tools of data collection
1	Credit appraisal team (experts & analysts)	33	33	Purposive	Questionnaire
2	Credit management team (relationship managers)	53	33	judgmental	Questionnaire
3	Directors (appraisal and management)	2	2	Purposive	Interview
	<b>Total</b>	<b>88</b>	<b>68</b>		

*Source: survey result and own computation (May 2017)*

### **3.4. Data Collection Instruments**

- **Questionnaire Development**

An already made questionnaire Fikirte(2015) used in her study Determinant of Default in Project Finance a Case Study of CBE was used with modification to fit the purpose of the study which were designed in five point Likert scale. The questionnaire consists of five parts. Part I consists of basic attributes of the credit performers/respondents; Part II is about the Bank Specific Challenges; Part III contains Borrower related challenge; and Part IV- contains External

Challenges. At the end space was left for general comments or additional challenges to be stated. In order to avoid biases by the respondents, the purpose of the study, i.e. only for the academic purpose, and the confidentiality of the response was well explained in the beginning of the questionnaire.

- **Interview**

In order to strengthen the findings obtained through surveying, interview was conducted with the Bank's two credit directors, taking in to account their long years of experience in the bank as well as in bank project financing.

- **Document Review**

In order to have more insight and understand in the challenges in full context, secondary documents were also reviewed.

### **3.5. Method of Data Presentation, Analysis and Interpretation of the Results**

Considering the requirements and objectives that have been discussed, this study used descriptive research design to assess what challenges are affecting project financing. Following data collection, the details of the results were entered into an industry recognized computer assisted analyzing program called Statistical Package for Social Sciences (SPSS) version 21.0 to process the findings. Descriptive statistics such as frequency distribution, mean, and standard deviation were used to analyze the quantitative data and results were presented in tabular form. The qualitative data collected by using personal interviews and document review were used to explain and elaborate the results which were found through the quantitative data or the variance thereof i.e. quantitative and qualitative.

### **3.6. Measurement of Reliability and Validity**

#### **Validity**

This study is conducted using the instrument other researchers used in other related studies with some modification to fit the current purpose. The content was hoped to have been checked and validated by academics and practitioners on previous study.

Furthermore, in order to use in this study its contents were checked in the pilot test where its contents were discussed and reviewed with different credit performers; and some modifications

were conducted to avoid ambiguity of items and maintain the precision to be clear for the all participants to answer correctly. The instrument also claimed to be valid content wise as it provided adequate coverage of the topic under study by classifying in to three categories. The instrument is valid as it were used on credit performers with enough qualification and experience on the subject and bias was avoided through purposefully selecting equal number of respondents from credit appraisal and credit management and triangulating the findings from questionnaire with interview and document review.

### **Reliability**

According to Ho (2006), the reliability of a measuring instrument is defined as its ability to consistently measure the phenomenon it is designed to measure. Corn Bach’s alpha is a coefficient of reliability used to measure the internal consistency of a scale; represented as a number between 0 and 1. The most common technique used in the literature to assess the scale’s reliability and stability is use of the Cronbach Alpha Statistics.

<b>Category</b>	<b>Reliability Statistics</b>	
	<b>No of Items</b>	<b>Cronbach’s Alpha</b>
Bank Related	23	.620
Borrower Related	13	.627
External Related	18	.726

One can conclude that the questionnaire is valid and reliable to achieve the objective of the study in assessing challenges affecting project financing.

### **3.7. Ethical Considerations**

The aim of this study was clearly described to concerned management officials and for the respondents before distribution of the research questionnaire and to ascertain the confidentiality of the respondents, on the questioner, respondents were not required to fill out their names.

Information collected via the instrument, publications and data obtained from the company would never be used for any other purpose other than its academic intent. Besides, the undertaker of this study gave full acknowledgements to the reference materials used in the study.

## **CHAPTER FOUR: DATA ANALYSIS AND INTERPRETATION**

This chapter presents and analyzes data obtained from three sections -the questionnaire, document review and interview. The results are analyzed by consolidating results.

### **4.1.Survey Result**

This section was further categorized into five sections; the first section was the respondent's profile, including their current position in the Bank, their experience in the overall banking and credit area, and their educational qualifications. The second part described respondents' opinion about bank specific challenges on project financing, including characteristics of the Bank, credit origination, credit appraisal, credit approval, and implementation. The third part assessed the survey results on the borrower's specific determinants on factors in connection with the character of the borrower, nature of the business/project and management problem of the project promoter. The fourth part described respondents' opinion on external determinants in connection with data or information constraints, banking industry, economic environment, political environment, and infrastructures. The fifth part, discussed responses for open ended questions.

#### **4.1.1.Respondents' Profile**

This section shows the respondents' profile regarding their current position in the Bank, their experience in the overall banking business as well as in the credit area and their educational qualifications. Sixty six questionnaires were ready to be distributed while sixty three were distributed but only sixty were responded. This was due to some absentees and some were not able to respond due to various reasons of their own. This made the response rate 91%.

#### **Respondents' Current Position in the Bank**

The respondents were composed of Customer Relationship Managers, Credit Appraisal Experts and Credit Analyst. The respondents were taken from both wings of Credit Management and Credit Appraisal to obtain balanced opinion and avoid bias towards either wing (see table 4.1). The respondents' positions in the Bank indicate that all the respondents who participate in the project finance, from credit origination to final loan collection. Hence, the respondents were very familiar about project finance and causes of project loan default.

## Respondents' Educational Background

With regard to the educational background of the respondents', 100% had at least Bachelor degree and 50% had masters degree (see table 4.1). Hence, one can observe that the respondents were well qualified. This enables the study to get insight full response.

**Table 4.1: Respondents' Current Position & Educational Background**

Your current position in the Bank	Current Position			Educational Background				
	№	%age	Cumulative Percent	PhD	Masters Degree	Bachelor Degree	Diploma	other, please specify
Customer Relationship Manager	28	46.7	46.7	0	12	16	0	0
Credit Appraisal Expert	18	30	76.7	0	11	7	0	0
Credit Analyst	14	23.3	100	0	7	7	0	0
<b>Total</b>	<b>60</b>	<b>100</b>	<b>100</b>	<b>0</b>	<b>30</b>	<b>30</b>	<b>0</b>	<b>0</b>

*Source: Survey result and own computation (May 2017)*

Customer Relationship Managers have a relatively more exposure in the project financing process from recruiting the customer to final loan disbursement and follow-up as they have contact with the customers. The Credit Analyst and Credit Appraisal Experts on the other hand focus on appraising the project to present their final recommendation to loan approving committee scrutinizing the feasibility study and over all documents.

## Respondents' Experience in the Bank

As shown in the following table, 78 % of the respondents' had experience of more than 5 years in the Bank, while 67% have more than 10 years of experience (see table 4.2). Only 22% have experience up to 5 years. Hence, we can conclude that respondents had enough experience in the banking business.

**Table 4.2: Respondents Experience in the Bank & Credit Process**

Experience	IN BANK			IN CREDIT PROCESS		
	№	%age	Cumulative Percent	№	%age	Cumulative Percent
Below 5 years	13	21.7	21.7	35	58.3	58.3
Between 5 to 10 years	7	11.7	33.3	15	25	83.3
Between 10 to 15 years	10	16.7	50	8	13.3	96.7
Above 15 years	30	50	100	2	3.3	100
<b>Total</b>	<b>60</b>	<b>100</b>	<b>100</b>	<b>60</b>	<b>100</b>	<b>100</b>

*Source: Survey result and own computation (May 2017)*

### **Respondents Experience in Credit Process**

Concerning respondents' experience in the credit process, 42 % have an experience in the credit process of more than 5 years while the remaining 58% had experience in the credit process of up to 5 years (see table 4.3). Hence, we can deduct that half of the respondents had experience in the credit process up to 5 years whereas the remaining half had more than 5 years in credit process. Accordingly, their opinion and view on the challenges affecting project financing was based on their experience in the credit process.

Hence the fact that the respondents are qualified in both i.e. in terms of education and experience in the project financing area enable the study to get insight full and reliable response.

#### **4.1.2. Bank Specific Challenges that Affects Project Financing**

In the second part of the questionnaire, respondents were requested to give responses regarding the bank specific challenges that are affecting the proper project financing. In connection with Bank specific challenges, respondents' opinion on factors in relation with character of the Bank, credit policy and procedure, credit appraisal, and credit approval was gathered and presented as follows. The respondents were requested to provide their agreement level as "strongly disagree", "disagree", "neutral", "agree" and "strongly agree". The researcher ranked these challenges from the most challenging to least challenging based on the mean value of respondents' responses; in order to ease understanding and catch quickly which challenges affected project financing significantly, under each challenges category.

The bank specific challenges were sub grouped in to character/nature of the bank, credit policy & and procedure, credit appraisal, and credit approval.

#### **Characteristics/Nature of the Bank**

Under characteristics of the Bank, two factors- ownership type of the Bank and size of the Bank were considered. Ownership from the view point of being public or private bank was assessed. According to the survey's finding, 72% of the respondent indicated this as challenge. Of which 22% strongly agreed. The mean of the respondent scored is close to 4 in this respect. Concerning size of the bank in terms of asset, capital and liquidity was also found to be major factor affecting project financing. 47% and 33% of the respondent agreed and strongly agreed in this respect with mean of 3.98. Only 13% and 11% of the respondent viewed these not

challenges. Hence, one can conclude bank character in terms of ownership and size of the bank to be one of the major challenges affecting project financing motive in selecting project to be financed and ability to make the required fund available (See Table 4.3)

**Table 4.3: Character of the Bank**

Bank Character	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Size of the Bank in terms of asset, capital, liquidity	60	2	3	5	8	5	8	1.03	47	20	33	3.98	1.03
Ownership(public/private) type of the Bank	60	2	3	6	10	9	15	1.01	50	13	22	3.77	1.01
<b>Average</b>	<b>60</b>		<b>3</b>		<b>9</b>		<b>11.5</b>		<b>48.5</b>		<b>27.5</b>	<b>3.88</b>	<b>1.02</b>

*Source: Survey result and own computation (May 2017)*

The average mean and standard deviation score of the two factors were 3.88 and 1.02 showing that bank characters was major challenge in project financing. These finding was further strengthened from document review undertaken. Approved project loan disbursement requests, sometimes due to liquidity problem had to wait for disbursement which had its own impact delay on implementation. The interview held with the bank's official also elaborated that prioritization of selected economic sectors was due to ownership (government owned) and government policy as surveyed under external factors. These shows viability by itself was not a guarantee to get finance in CBE, among other things. The low interest rate charged was also because of the ownership factors, according to interview's finding, which had motive of not only profit maximization but also economic development through affordable cost of capital. The bank adjusts risk factor not by higher interest but other mechanism such as share of equity and debt ratio and/or personal/corporate guarantee or additional collateral, the interviewee elaborated.

### **Credit Policy and Procedure**

Under the credit policy and procedures, six challenges were considered. These challenges were dissatisfaction of customers on collateral valuation, unavailability soft product of project financing like consultancy & advisory, unavailability of commitment charge, low and flat interest rate charged by the Bank that does not depend on various risk factors, lack of flexibility

in the bank's credit policy and procedure and the fact that lease financing was not being used in place of project financing.

Regarding high dissatisfaction of customers on collateral valuation, a large portion (87%) indicated it was challenge while 7% found it not challenge. Unavailability soft product of project financing like consultancy & advisory, 75% of the respondent indicated is challenge with only 7% found it to be not a challenge. Unavailability of commitment charge, low & flat interest rate charged and lack of flexibility in the bank's credit policy are among the challenges respondent stated as challenges with 65%, 57% and 57% of the total respondent respectively.

Concerning lease financing as alternative to project financing, 50% of the respondent responded as challenge while the remaining 50% responded not challenge and neutral with 25% each.

The average mean of bank specific challenge related to credit policy and procedures is 3.54 while dissatisfaction of customers on collateral valuation and lease financing scored the highest and the lowest with mean of 3.95 and 3.22 respectively (see table 4.4).

**Table 4.4: Challenges in connection with Bank credit policy and Procedure**

Credit Policy & Procedures	Tot №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
dissatisfaction of customers on collateral valuation	60	1	1.7	5	8.3	2	3.3	40	66.7	12	20.0	<b>3.95</b>	<b>.85</b>
Unavailability soft product of project financing like consultancy, advisory in order to utilize their economy of scale in information	60			4	6.7	11	18.3	38	63.3	7	11.7	<b>3.80</b>	<b>.73</b>
unavailability of commitment charge	60	2	3.3	6	10.0	13	21.7	35	58.3	4	6.7	<b>3.55</b>	<b>.89</b>
Low and flat interest rate charged by the Bank that does not depend on various risk factors	60	3	5.0	17	28.3	6	10.0	21	35.0	13	21.7	<b>3.40</b>	<b>1.25</b>
Lack of flexibility in the bank's credit policy and procedure	60	4	6.7	15	25.0	5	8.3	31	51.7	5	8.3	<b>3.30</b>	<b>1.14</b>
Lease financing can ease and alternatively be used in place of project financing	60	5	8.3	10	16.7	15	25.0	27	45.0	3	5.0	<b>3.22</b>	<b>1.06</b>
<b>Average</b>			<b>4</b>		<b>16</b>		<b>14</b>		<b>53</b>		<b>12</b>	<b>3.54</b>	<b>0.99</b>

Source: Survey result and own computation (May 2017)

The overall frequency distribution and mean of responses indicate factors in connection with the Bank credit policy and procedures were challenges to project financing.

According to the questionnaire, 60% of the respondents with mean value of 3.3 responded lack of flexibility in the credit policy and procedure was challenge in project financing. However, the official stated otherwise. The bank's credit policy and procedure clearly stipulated there is a mechanism of treating various cases based on their merit on exceptional and deviation bases even though the case does not strictly confirm to the bank's Credit Procedure which reads as below:

- i. Exceptions shall mean that loans and advances approved by variations from the credit process procedure. However, the nature of the loan request or issues raised therein is within the spirit of the credit procedure.*
- ii. Deviations shall mean that loan requests which are not covered in the credit process procedure. The nature of the loan request or issues raised therein is without or beyond the spirit of the credit procedure.*

Besides, it was underlined by the officials that, the procedure is reviewed every three years and, if there was a need in between, memo would be issued to entertain the need.

The document review revealed the above points paused challenges such as appeal on collateral valuation, project loans bought from other banks due to higher interest rate charged, among other things. Besides, condition lifting requests were also among the observed loan processes which were related to procedure flexibility. However, it was also learnt from the document review that although interest rate had always been similar for all kind of project loan approved and no project loan has been approved with commitment change, there was article in the contract that give the bank the exclusive right to increase interest rate whenever found necessary without the need to notifying the borrower.

### **Credit Appraisal**

Twelve challenges were assessed in the credit appraisal subgroup of bank related challenges. These challenges were insufficient support being rendered by research unit to credit processing unit, contingency cost should be held for unanticipated costs to be incurred, not-practicing team

based approach in appraising project requests, lack of support with software that simplify appraisal process, lack of training for credit performers with appropriate frequency and depth, not appraising end- to-end of the project(incorporating in the appraisal report all parties supposed to be involved in the project-contactors, suppliers, operators and end product buyers), weak credit assessment on the market, technical, financial, economic and environmental feasibility of the project, insufficient loan processing time, inadequate skill of the credit performers to appraise project loan, lack of understanding of scope of the project, while appraising project cost, contingency is held for unanticipated costs to be incurred, and not matching the project income with debt servicing at the time of credit sanctioning. These challenges were presented in the respondents' rating of mean starting from highest to lowest.

As shown in the table below, four of the first had mean that is above 3.5 showing the respondents' rating them as major challenges in credit appraisal process. Of this insufficient support being rendered by research unit for appraising project request had mean of 4.5 and 85% of the respondent rating it as challenge being agreed and strongly agreed.

Respondents also acknowledge that while appraising project cost, contingency should be held for unanticipated costs to be incurred with mean of 3.85 and frequency percentage of 78%. Not practicing team based approach, while appraising project financing has been rated with mean of 3.65 and 73% of the respondents falling in the agree and strongly agree choice. The documents review strengthens the respondents' result that no contingency cost were incorporated in the calculation of total project cost for financing.

Lack of support with software that simplify appraisal process and lack of training for credit performers with appropriate frequency and depth were also challenges having mean value of 3.53 and 3.50 respectively. In terms of percentage, 63.3% and 70% of the 60 respondents respectively have indicated these challenges as agree and strongly agree ratings.

Weak credit assessment on the market, technical, financial, economic and environmental feasibility of the project and insufficient loan processing time are amongst the challenges with mean of 3.40 and 3.28; and 65% and 57% of the respondents indicating their rating as agree and strongly agree, respectively.

Regarding the rating on the practice of holding contingency for unanticipated cost, 53% of the respondents chose to disagree indicating low practice of holding contingency cost. As to not matching the project income with debt servicing at the time of credit sanctioning, 37% disagree, 20% were neutral and 43% agree (See Table 4.5).

**Table 4.5: Challenges in connection with Bank Credit Appraisal**

Credit Appraisal	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Insufficient support being rendered by research unit to credit processing	60	3	5.0			6	10.0	29	48.3	22	36.7	4.12	.958
while appraising project cost, contingency should be held for unanticipated costs to be incurred	60	2	3.3	2	3.3	9	15.0	37	61.7	10	16.7	3.85	.860
not-practicing team based approach in appraising project requests	60	4	6.7	8	13.3	4	6.7	33	55.0	11	18.3	3.65	1.132
Lack of support with software that simplify appraisal process	60	2	3.3	9	15.0	11	18.3	29	48.3	9	15.0	3.57	1.031
lack of training for credit performers with appropriate frequency and depth	60			18	30.0	2	3.3	30	50.0	10	16.7	3.53	1.096
not appraising end to end of the project(incorporating in the appraisal report all parties supposed to be involved in the project-contactors, suppliers, operators and end product buyers)	60	2	3.3	12	20.0	4	6.7	38	63.3	4	6.7	3.50	1.000
Weak credit assessment on the market, technical, financial, economic and environmental feasibility of the project	60	2	3.3	14	23.3	5	8.3	36	60.0	3	5.0	3.40	1.012
Insufficient loan processing time	60	4	6.7	17	28.3	5	8.3	26	43.3	8	13.3	3.28	1.209
Inadequate skill of the credit performers to appraise project loan	60	5	8.3	17	28.3	9	15.0	26	43.3	3	5.0	3.08	1.124
lack of understanding of scope of the project	60	6	10.0	15	25.0	7	11.7	32	53.3			3.08	1.094
while appraising project cost, contingency is held for unanticipated costs to be incurred	60	5	8.3	17	28.3	10	16.7	24	40.0	4	6.7	3.08	1.139
not matching the project income with debt servicing at the time of credit sanctioning	60	4	6.7	18	30.0	12	20.0	26	43.3			3.00	1.008
<b>Average</b>	60		<b>5.8</b>		<b>22.5</b>		<b>11.8</b>		<b>49.0</b>		<b>10.8</b>	<b>3.43</b>	<b>1.06</b>

*Source: Survey result and own computation (May 2017)*

Document review's result had been in parallel with the above survey in that the focus of the appraisal was the borrower and no attention was given to the other parties of the project such as the project-contactors, suppliers, operators and end product buyers. Request for project loan

rescheduling, restructuring, and so on were partly the short fall of the proper appraising, among other issues as will be analyzed latter such as lack of foreign currency(bank & external challenge) and on time implementation due to management problem(customer-related challenge), as document review and interview manifested. In general, the average survey results of the above twelve credit appraisal challenges had average mean of 3.43 and of which 49% indicated as agree as challenge and 11% strongly agree as challenge. These shows the existence of various credit appraisal related challenges impacting project financing.

### Credit Approval

Under credit approval challenges category, three challenges- under financing, management intervention in loan processing and approval and under financing have been considered.

Under financing and management intervention in loan processing and approval had been viewed as challenge in project financing by 65% of the respondents. While 10% and 17% of the respondents viewed these two factors as not challenge respectively while the remaining 25% and 20% were neutral.

Over financing was not viewed as challenges by majority of the respondents (42%) while 25% have not concurred with neither disagrees nor agree (see table 4.6).

**Table 4.6: Credit Approval Related Challenges**

Credit Approval	Total No	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		No	%	No	%	No	%	No	%	No	%		
under financing	60	2	3.3	4	6.7	15	25	32	53	7	11.7	3.63	.901
Management intervention in loan processing and approval	60	4	6.7	5	8.3	12	20	33	55	6	10.0	3.53	1.016
over financing	60	8	13.3	17	28.3	15	25	18	30	2	3.3	2.82	1.112
<b>Average</b>			<b>8</b>		<b>14</b>		<b>23</b>		<b>46</b>		<b>8</b>	<b>3.33</b>	<b>1.01</b>

*Source: Survey result and own computation (May 2017)*

The respondents, generally viewed under financing and management intervention as challenges while over financing was viewed not challenge.

The officials interviewed regarding management intervention, responded that the private and public investment could not be viewed with the same spectacles and there were times financing requirement need be urged from the view points of development and government plan.

To sum up bank specific challenges affecting project financing, the survey result shows character of the bank, credit policy and procedure, credit appraisal & approval are challenges affecting project financing in CBE in descending order with mean value of 3.88, 3.54, 3.43 and 3.33 respectively.

#### 4.1.3. Borrower Specific Challenges

In this category, respondents' opinion in connection with character of the borrower, nature of the project and management problem of the project promoter were gathered and presented in the following manner:

##### Character of the Borrower

Two broad characters of borrowers were considered under this sub category. Lack of integrity and unplanned business/project expansion what is commonly known as project creep. Lack of integrity is demonstrated in terms of not disclosing truthful information, temptation to divert loan purpose and lack of commitment to the original contractual agreement which include frequent scope change of project after loan has been approved based on the submitted feasibility which were amongst issues observed in the document review.

Un-planned and ambitious business expansion was rated as customer related challenge by 94% of the respondent; while lack of integrity rated challenge by 87% of the respondents with mean value of 4.10 and 4.05 respectively. What was more was only three respondents viewed borrower character not to be challenge in project financing (See table 4.7).

**Table 4.7: Character of the Borrower**

Character of the Borrower	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Lack of integrity of the borrower	60	3	5.0			1	1.7	40	67	16	27	4.10	.675
Un-planned and ambitious business expansion	60			2	3.3	6	10.0	39	65.0	13	21.7	4.05	.698
<b>Average</b>	<b>60</b>		<b>3</b>		<b>2</b>		<b>6</b>		<b>66</b>		<b>24</b>	<b>4.08</b>	0.687

Source: Survey result and own computation (May 2017)

The average frequency distribution viewing borrower character as challenge was 90% and the average mean & standard deviation as shown above is 4.08 and 0.687 respectively. This makes lending very much a challenge when the complexity and uniqueness of project were added. Hence, transparency and trust need to be developed to reduce transaction cost of project financing.

### **Project Nature**

In these borrower related subgroup of categories, two factors such as location of the project and economic sector of the project surveyed.

Both factors were found to be challenges affecting project financing but with a little bit varying degree. That is location of the project affected access to major raw material, market for output, access for transport or difficulty for follow up etc. Economic sector of the project promoter intended to engage was another factor which encouraged, discouraged or left untouched depending on if it was in line with government development policy or on not. In the practice of CBE, economic sector had the ability to determine whether the project was to be accepted for process or to be banned from entering for process. For instance, whether the project output generates foreign currency through export directly or it substitutes import and the like (See Table 4.8).

**Table 4.8: Project Nature**

Credit Approval	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Location of the project	60	1	1.7	2	3.3	6	10	33	55.0	18	30.0	4.08	.829
Economic sector of the project	60			10	16.7	12	20	28	46.7	10	16.7	3.63	.956
<b>Average</b>	<b>60</b>		<b>0.8</b>		<b>10</b>		<b>15</b>		<b>51</b>		<b>23</b>	<b>3.86</b>	<b>.893</b>

*Source: Survey result and own computation (May 2017)*

Location of the project had been indicated to be challenge by 85% of the respondents, while 10% of the respondents are not in either sides and only 5% rated it as not to be challenge that affects project financing. One can draw a conclusion from hotel and cement factory projects sited at rural area and in the capital of Ethiopia respectively.

The average frequency distribution agreeing (75%), mean (3.86) and sd (0.89) of both challenges emphasize the challenges of location and economic sector of project for project financing.

### **Management Problem of the Project Promoter**

Under management problem of the project promoter, nine factors were presented for respondents. These were not executing project as per the feasibility's Implementation Schedule, incomplete and not well prepared feasibility study presented by the project promoter, financial strength, under utilization of project's capacity due to various reasons (such as lack of market, raw material, FCY, etc.), lack of separation between the project, project promoter, and project management, lack of Financial management knowledge, adequacy of an up-to-date risk management plan, familiarity with the industry and legal structure of the company (sole proprietorship, private limited company, share company), presented in the respondents' mean value in descending order.

Not executing project as per the feasibility's Implementation Schedule entailed project delay and subsequent cost overrun. This also led to repeated case analysis of the root cause, presentation to the committee for deliberation and approval of rescheduling and restructuring.

Incomplete and not well prepared feasibility study presented by the project promoter lengthened project loan processing time due forwarding comments and documents back and forth which also impacted assessing proper project investment cost and project return and incorrect conclusion and recommendation which ultimately affected customer satisfaction or bank due to misallocation of resource.

Financial strength of the promoter gave confidence to the bank made the project success with ability of shouldering unexpected out come due to various unforeseen circumstances.

Under utilization of project's capacity due to various reasons (such as lack of market, raw material, FCY, etc.) impacted project's ability to make the required cash flows and service its debt on time and make the expected return for the stakeholders including promoters, employees, and government. Besides it limited from maximizing the benefit from the economy of scale to the minimum or made it unable to execute its short term commitment so that various claims encountered that led to litigation.

Legal structure of the project affected the going concern of the project in case of sole proprietorship while the other two made it difficult for fast decision making when need arise, for instance to raise capital and death of the sole proprietor. Lack of separation among project, project promoter and project management will loosen the project's transparency.

Familiarity with the industry, help curb emerging problems and know in and out of the business in terms of input, output and market.

All factors listed under management problem are found to be challenges with relatively higher rating of distribution frequency ranging from minimum of 65% to maximum of 96.6% for legal structure of the project to not executing project per the feasibility study's implementation schedule respectively as tabulated below.

**Table 4.9: Management Capacity Problem**

Management Problem	Total N <sub>2</sub>	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		N <sub>2</sub>	%	N <sub>2</sub>	%	N <sub>2</sub>	%	N <sub>2</sub>	%	N <sub>2</sub>	%		
not executing project as per the feasibility's Implementation Schedule thereby delaying the project and incurring cost overrun	60					2	3.3	32	53.3	26	43.3	4.40	.558
Incomplete and not well prepared feasibility study presented by the project promoter	60	1	1.7			3	5.0	31	51.7	25	41.7	4.32	.725
financial strength	60			3	5.0	1	1.7	42	70.0	14	23.3	4.12	.666
under utilization of project's capacity due to various reasons such as lack of market, raw material, FCY	60	4	6.7			2	3.3	35	58.3	19	31.7	4.08	.979
lack of separation among the project, project promoter, and project management	60	3	5.0			5	8.3	37	61.7	15	25.0	4.02	.892
lack of Financial management knowledge	60	2	3.3	2	3.3	5	8.3	39	65.0	12	20.0	3.95	.852
Adequacy of an up-to-date risk management plan	60	2	3.3	3	5.0	8	13.3	35	58.3	12	20.0	3.87	.911
familiarity with the industry	60	5	8.3	5	8.3	9	15.0	33	55.0	8	13.3	3.57	1.095
Legal structure of the company (sole proprietorship, PLC, S.Co.)	60	3	5.0	13	21.7	5	8.3	28	46.7	11	18.3	3.52	1.172
<b>Average %age and Mean</b>	<b>60</b>		<b>3.7</b>		<b>4.8</b>		<b>7.4</b>		<b>57.8</b>		<b>26.3</b>	<b>3.98</b>	<b>0.87</b>

Source: Survey result and own computation (May 2017)

The average frequency distribution and mean of the above borrower related management problem related nine challenges is 84% agree or strongly agree, 7.4% neutral and 8.5% disagree or strongly disagree while mean close to 4 and deviation of 0.87.

While reviewing documents, the above stated challenges had been observed manifesting themselves in various ways. To state few:

- Due to not completing projects as per the implementation schedule, associated cost overrun from inflation and exchange rate fluctuation were requested to be financed by bank
- Due to low financial strength, there were observed cases where borrows were unable to contribute expected equity contribution some after disbursement started while some other quite all together for this reason and approved loans were unutilized
- Due to incompleteness of feasibility study presented, repeated back and forth of the files among appraisers, customer relationship manger and customers and related correspondences were witnessed
- Majority of presented total investment cost were inflated by more than 25% on average when compared to appraised total investment costs for loan approval. However, this project work undertaker could not confirm which was correct i.e. either it was due to the applicants' investment cost inflation or appraiser's investment cost deflation and suggests another study on the issue
- due to various reasons, project was not completed as per the structured neither equity/loan ratios, investment cost, nor implementation schedule and some form of request for decision modification, additional financing, and rescheduling/restructuring were common phenomena
- Also management gap in terms of low qualification and unrelated qualification/expriance were among challenges

Document review undertaken had in summary, borrower specific challenges affecting project financing, the survey result shows character of the borrower, nature of the project and

management problem of the project promoter have been found to be challenges affecting project financing with varying degree and intensity as elaborated above.

The average frequency distribution viewing borrower character as challenge is 90% and the average mean is 4.08. For nature of the project, the average frequency distribution agreeing is 75% and while the average mean is 3.86 while for management problem related challenges, the average frequency distribution and mean is 84% and 4 respectively.

#### **4.1.4. External Challenges that Affect Project Financing**

In the fourth part of the questionnaire, respondents were requested to give responses regarding external challenges that affect the proper project financing. In connection with external challenges, respondents' opinion on factors in relation with data/information, financial intermediaries, economic environment, political environment and infrastructure have been gathered and presented as follows. The respondents were requested to provide their agreement level as "strongly disagree", "disagree", "neutral", "agree" and "strongly agree". The researcher ranked these challenges from the most challenging to least challenging based on the mean value of respondents' responses; in order to ease understanding and catch quickly which challenges affects project financing, under each challenges category.

External challenges were sub grouped in to data/information, financial intermediaries, economic environment, political environment and infrastructure.

#### **Data/Information Constraints**

Under this sub category, three challenges were surveyed-unavailability of independent private/government body that provide relevant data for project financing tracking each industry, lack of properly trained consultants, legal advisors, project managers and availability of necessary information to appraise the loan at national level such as National Bank of Ethiopia, Central Statistics Authority, Ministry of Industry, Investment Office, etc. The presence of independent private/government body that provide relevant data for project financing tracking each industry will help in canalizing industry trend & average and various challenges of the respective industry. Trained consultants, legal advisors, project managers will smoothen project life cycle i.e. initiation, planning, execution and closure through proper application of project management practice.

In order to appraise and evaluate the viability of the project in terms of market, technical, financial, social, economical and environmental of the project, the bank has to gather information from various governmental organs such as, Central Statistics Authority, National Bank of Ethiopia, Ministry of Industry and Investment Office. The bank triangulate these data in order to appraise and assess the feasibility of project for which financing is requested by various organs.

Regarding unavailability of independent private/government body that provide relevant data for project financing tracking each industry's trend and industry average was identified as challenge by 83% of the respondents being agreed or strongly agree whereas 10% are neutral and only 7% disagreed. Project is financed based on data used to forecast future cash flows. Wrong data fed in to the forecast will result wrong output which would affect all stakeholders especially the bank and the borrower.

Concerning lack of properly trained consultants, legal advisors, project managers, 55% ticked agree, 23% ticked strongly agree making the total percent rating this factor as a challenged 78%; while 7% are neutral as to where it is a challenge or not but 7% strongly disagree and 8% disagree. This was one the observed challenges which led to elongated processing time and back and forth of documents related correspondences.

The third factor-availability of necessary information to appraise the loan at national level such as National Bank of Ethiopia, Central Statistics Authority, Ministry of Industry, Investment Office, etc.- is also rated as challenge by the majority of the respondents to the survey(73%); while a quarter of the respondents rated (strongly)disagree. Insignificant numbers (2) of the respondents are neutral to level this factor to either a challenge or not (See Table 4.10).

**Table 4.10: Data or Information Constraints**

Data/Information	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
unavailability of independent private/government body that provide relevant data for project finance tracking each industry	60	3	5.0	1	1.7	6	10.0	29	48.3	21	35.0	4.07	.989
Lack of properly trained consultants, legal advisors, project managers	60	4	6.7	5	8.3	4	6.7	33	55.0	14	23.3	3.80	1.102
availability of necessary information to appraise the loan at national level such as National Bank of Ethiopia, Central Statistics Authority, Ministry of Industry, Investment Office, etc.	60	5	8.3	10	16.7	1	1.7	27	45.0	17	28.3	3.68	1.282
<b>Average %age and Mean</b>	<b>60</b>		<b>6.7</b>		<b>8.9</b>		<b>6.1</b>		<b>49.4</b>		<b>28.9</b>	<b>3.85</b>	<b>1.12</b>

*Source: Survey result and own computation (May 2017)*

The average frequency distribution of data/information is challenge was displayed by score of 78% choosing (strongly) agree, mean of 3.85 and standard deviation of 1.12.

### **Financial Intermediaries**

Factors related to financial intermediaries surveyed were not practicing syndicate lending among banks, non-development of capital market, poor credit culture in the country, and limited capacity in terms of capital, liquidity and project financing practice of local banks, non-engagement of local banks in soft product of project financing such as consultancy & advisory in order to utilize their economy of scale in information and unavailability of various insurance.

Concerning not practicing syndicate lending among banks, 87% for the respondents' rated it as (strongly) agree, 8% were neutral, and 5% were (strongly) disagree. It could have been a solution for capital and liquidity limitation and risk diversion for huge investment, given individual bank's current situation in addition to best project financing practice sharing of experience with each other.

Non-development of capital market both for equity and loan was also rated as challenge by 80% of the respondents, while 3% were neutral and the remaining 7% disagree. This challenge limited

the borrowers' alternatives for project financing while it also undermined the ability of bank to gather useful information easily from the available market as literatures dictated.

Poor credit culture as a challenge was endorsed by 75% the respondents as it was in character of the borrower in third part of the survey, while 17% ticked neutral and the minor percent (8%) indicated that poor credit culture was not a challenge in project financing practice of CBE. This challenge extended to the poor/unreasonable feasibility study preparation that was not professionally and ethically prepared and not few times without the understanding of the content of the feasibility by the applicants. This led some customer to be surprised by the loan approval decision and imposed conflict.

Limited capacity in terms of capital, liquidity, and project financing practice of local banks was another challenge emanating from external environment financial intermediaries. 47 of the 60 individuals' surveyed responded it was a challenge which means 78% of the sampled population. Of the total 60 performers requested, 7, 4, and 2 individuals gave their responses as neutral, disagree and strongly disagree respectively out. That means 10% viewed this factor not to be challenge.

Non-engagement of local banks in soft product of project financing like consultancy, advisory in order to utilize their economy of scale in information other than providing fund for project financing was identified gap unlike the developed nations. Most of the renowned bank that are engaged in project financing by providing fund, harvest income from charging customers for providing consultancy and advisory services from the reach information they accumulated in industry wise. The survey shows that 65% of the respondent ticked "agree" or "strongly agree".

**Table 4.11: Financial Intermediaries**

Financial Intermediaries	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
not practicing syndicate lending among banks	60	2	3.3	1	1.7	5	8.3	34	56.7	18	30.0	4.08	.869
non-development of capital market	60	1	1.7	3	5.0	2	3.3	40	66.7	14	23.3	4.05	.790
Poor credit culture in the country	60	2	3.3	3	5.0	10	16.7	33	55.0	12	20.0	3.83	.924
limited capacity in terms of capital, liquidity, and project financing practice of local banks	60	2	3.3	4	6.7	7	11.7	39	65.0	8	13.3	3.78	.885
non-engagement of local banks in soft product of project financing like consultancy, advisory in order to utilize their economy of scale in information	60	4	6.7	8	13.3	7	11.7	32	53.3	9	15.0	3.57	1.110
unavailability of various insurance cover such as commercial, political, agricultural, currency devaluation etc	60	24	40	19	31.7	10	16.7	7	11.7	24	40.0	2.00	1.025
<b>Average</b>	<b>60</b>		<b>4.2</b>		<b>8.6</b>		<b>11.1</b>		<b>58.3</b>		<b>17.8</b>	<b>3.55</b>	<b>0.93</b>

*Source: Survey result and own computation (May 2017)*

The overall average frequency distribution, mean and standard deviation suggest that financial intermediaries have significant impact on project financing as depicted in the table above i.e. more than 75% are inclined to agree with mean of 3.55 out of 5 and standard deviation of 0.93.

Unavailability of various insurance cover was not a challenge according to the survey result with mean value of 2(72% of the respondent choosing strongly disagree and disagree). This was totally in contradiction to the literature-which bases project management as a mechanism of risk distribution to the best able to handle it through insurance; and to the document review results where projects that were not covered against upraising and riot were set on fire.

### **Economic Environment**

This sub category of external challenges was sub divided in to lack of foreign currency, inflation and economic growth.

Lack of foreign currency was viewed as challenge by 97% of the respondents with none of the respondent viewing it otherwise. Inflation followed with 88% percent of the respondents ticked "agree" and strongly agree. Economic growth rating was distributed with 12% ticked agree and strongly agree, one third ticked neutral and the remaining 5% fall in "disagree" and "strongly disagree".

**Table 4.12: Economic Environment**

Economic Environment	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Lack of Foreign currency	60					2	3.3	24	40.0	34	56.7	4.53	.566
Inflation	60			1	1.7	6	10.0	37	61.7	16	26.7	4.13	.650
Economic Growth	60	3	5.0	4	6.7	20	33.3	25	41.7	8	13.3	3.52	.983
<b>TOTAL</b>	<b>60</b>		<b>1.7</b>		<b>2.8</b>		<b>15.6</b>		<b>47.8</b>		<b>32.2</b>	<b>4.06</b>	<b>0.73</b>

Source: Survey result and own computation (May 2017)

Due to lack of foreign currency, machineries and/or raw materials could not be imported hindering project implementation as per the schedule and inflation-caused cost escalation and foreign currency fluctuation were among the financing requests, according to document review and interview. Sustained economic growth manifested in the country created demand for more projects to be financed as shown in total loan advance by CBE (see Table 1.1).

The average frequency distribution of challenges related to economic environment of three challenges was 32% and 48% responded strongly agree and agree respectively, 16% of the respondents are neutral and 4% stated that it not challenge.

### Political Environment

Political environment was sub divided into government policy and political factors. As that of foreign currency from economical factor, political factor was viewed by 97% of the respondents as challenge of which majority 57% emphasized with "strongly agree" whereas only 2 individuals out of 60 leveled this challenge as neutral.

Regarding government policy, 88% of the respondent indicated it as challenge, whereas 10% were neutral and 2% indicated their choice as "disagree".

**Table 4.13: Political Environment**

Political Environment	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Political Factors	60					2	3.3	24	40.0	34	56.7	4.07	.841
Government Policy	60			1	1.7	6	10.0	37	61.7	16	26.7	3.92	.926
<b>Average</b>	<b>60</b>		<b>0</b>		<b>0.8</b>		<b>6.7</b>		<b>50.8</b>		<b>41.7</b>	<b>3.99</b>	<b>0.88</b>

Source: Survey result and own computation (May 2017)

Political factors like upraising impacted project financed by CBE examples were demurrage cost incurred in Djibouti port partly occurring from inability to use available alternative ports and damage done by the recent political upraising where projects financed by CBE were set on fire. It was important here to raise the insurance challenge, for the bank did not anticipated such upraising and did not transferred the risk to the most able party – insurance company-by enforcing the borrower buy political risk policy cover. Due to government policy, to allocate resource only to selected priority, the bank forgone viable projects non-priority projects.

The average mean of the two factors is 4 indicating that political environment affects project financing through political factors and government policy while standard deviation is 088 (See Table 4.13).

### Infrastructure

Under infrastructure sub category of external challenges affecting project financing, electric power interruption, information technology/communication, transport facility and water supply are discussed.

All of the four factors were rated to be challenge by 88% of the respondents. The remaining 4% and 8% respectively have indicated infrastructure factor as neutral and disagree.

**Table 4.14: Infrastructure**

Infrastructure	Total №	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree		Mean	Std. D
		№	%	№	%	№	%	№	%	№	%		
Electric Power	60	1	1.7	1	1.7	1	1.7	31	51.7	26	43.3	4.33	.752
Information Technology or communication	60	3	5.0	2	3.3	2	3.3	38	63.3	15	25.0	4.000	.94
Transport Facility	60	1	1.7	5	8.3	2	3.3	42	70.0	10	16.7	3.917	.83
Water Supply	60	3	5.0	3	5.0	5	8.3	36	60.0	13	21.7	3.883	.98
	<b>60</b>		<b>3.3</b>		<b>4.6</b>		<b>4.2</b>		<b>61.3</b>		<b>26.7</b>	<b>4.03</b>	<b>0.87</b>

*Source: Survey result and own computation (May 2017)*

The average mean of infrastructure as a challenge is 4 showing that it had impact on project financing as shown earlier with location of the project and standard deviation is 0.87.

There were observed cases where due to lack of electric power, operation could do not be started or production could not be done at planned capacity and repeated grace period and the subsequent repayment tenure extension which reaffirm the survey findings.

To sum up survey result under external factors affecting project financing, respondent viewed economic environment, infrastructure, political environment, data/information and financial intermediaries were challenges affecting project financing with survey mean of 4.06, 4.03, 3.99 and 3.55 respectively.

### **Open Ended Questions**

In the fourth part of the questionnaire, respondent were requested what additional challenges do they observe in each of bank specific, borrower specific and external environment specific factors that affects proper project financing. The issues pointed out were somehow similar with what were raised in the questionnaire i.e. addressed in one way or another.

### **Documents Review**

- **Distribution of Project Loan by Economic Sector**

Although CBE has a formal credit procedure to finance projects loans for all sectors, due to liquidity and to focus more on the sectors that have great contribution for the national development, it extend credits mainly for the following priority sectors.

**Export Projects-** to encourage foreign currency generation for the country CBE promotes project loans for exporters, the financing may take the form of building new factory, expansion of the existing factory, acquiring of machineries, acquiring of motor vehicle or initial working capital.

**Agriculture-** project loan in the form of agricultural input loan, agricultural machinery loan and agricultural motor vehicle loans.

**Manufacturing** – a business engaged in this sector is also eligible for obtaining project loan at CBE. The loan may be for the establishment of new factory or for the expansion of the existing factory.

**Construction of Infrastructure-** contractors but only engaged in public infrastructures that have a formal contract with Federal or Regional Government offices and/or public enterprise such as Ethiopian Road Authority, Ethiopian Sugar Corporation, Metal and Engineering Corporation, Ethiopian Rail Way Corporation and various Universities, are also eligible for credit in CBE.

**Table 4.15: Distribution of (medium and long term) Approved Project Loan by Economic Sector** 'million

Economic sector	2011		2012		2013		2014		2015		2016	
	Birr	%age	Birr	%age	Birr	%age	Birr	%age	Birr	%age	Birr	%age
Agriculture	53,101	0.40	4,506	0.04	49,081	0.20	16,544	0.14	517,390	1.95	318,153	1.55
Building & construction	24,990	0.19	7,761	0.07	200,868	0.84	486,449	4.19	691,939	2.61	732,489	3.56
Domestic trade & services	251,769	1.88	952,697	8.22	1,068,531	4.44	660,845	5.69	2,602,379	9.82	3,966,681	19.28
Industries	13,054,361	97.40	10,606,607	91.49	22,618,858	94.07	10,263,243	88.39	22,461,614	84.78	14,905,065	72.43
International trade	18,373	0.14	21,186	0.18	66,143	0.28	162,175	1.40	163,778	0.62	574,609	2.79
Other loans & advances		0.00	775	0	40,630	0.17	21,829	0.19	57,068	0.22	80,423	0.39
<b>TOTAL</b>	<b>13,402,595</b>	<b>100</b>	<b>11,593,531</b>	<b>100</b>	<b>24,044,111</b>	<b>100</b>	<b>11,611,085</b>	<b>100</b>	<b>26,494,168</b>	<b>100</b>	<b>20,577,420</b>	<b>100</b>

Source: CBE management information system (May 2017)

From the above table one can see that the major share approved loan was held by industries when compared in economic sectors. It took an average share 88% in the six years period reviewed.

#### Approved Medium and Long Term Loans by Ownership Type

Considering the last six years i.e. from 20/11-2016, large portion of loan was approved to public consisting of 74% on average. However, the trend shows a decreasing percentage from 92% in 2011 to 58% in 2016. On the other hand, loans to private sectors were increasing from 1.1 billion in 2011; it has escalated to 8.7 billion in 2016. See the details the table below.

**Table 4.16: Approved Medium and Long Term Loans by Ownership Type** 'million

Ownership	2011		2012		2013		2014		2015		2016		Average
	Birr	%age	Birr	%age	Birr	%age	Birr	%age	Birr	%age	Birr	%age	
Cooperative	353	0.0		0.0	79,874	0	33,959	0.3	3,836	0.01	24,594	0.1	0.1
Private	1,106,111	8	1,380,044	12	3,038,895	13	5,641,126	49	7,863,557	30	8,678,530	42	26
Public	12,296,131	92	10,213,487	88	20,925,343	87	5,936,000	51	18,626,774	70	11,874,296	58	74
<b>TOTAL</b>	<b>13,402,595</b>	<b>100</b>	<b>11,593,531</b>	<b>100</b>	<b>24,044,111</b>	<b>100</b>	<b>11,611,085</b>	<b>100</b>	<b>26,494,168</b>	<b>100</b>	<b>20,577,420</b>	<b>100</b>	<b>100</b>

Source: CBE management information system (May 2017)

- **CBE's Role in Second GTP**

According to the second GTP, with regard to mobilization of credit, during GTP II period, CBE is expected to provide credit for public investment projects in infrastructure and working capital for industrial sector. The total credit allocated for the service sector is to be obtained from CBE and private banks while the DBE is assigned to provide short, medium and long-term credit for viable development projects, including industrial and agricultural investment projects. Overall, the amount of resource that is required for GTP II and its allocation is depicted in Table below.

**Table 4.17: Expected Loan in GTP II** 'million

Accounts	Base year	Projection					5 Years Total
	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	
Total Domestic Credit Allocation By Economic Sectors/1/	158,072.30	207,133.30	254,565.70	315,459.10	401,648.60	505,861.80	1,684,668.40
<b>Agriculture</b>	15,680.10	20,208.80	26,197.30	34,109.20	44,124.10	54,966.10	179,605.40
Long and Medium term loans	1,565.10	2,419.00	2,853.40	3,672.60	4,262.50	5,410.90	18,618.40
Short-term loans	14,115.00	17,789.80	23,343.90	30,436.60	39,861.60	49,555.20	160,987.00
<b>Industry and prioritized sectors</b>	86,467.20	116,787.40	146,581.60	185,295.30	244,037.90	312,855.70	1,005,557.90
Prioritized sectors (power, rail, housing etc.)	56,410.80	58,260.70	73,803.50	94,040.70	120,625.20	155,978.50	502,708.60
<b>Manufacturing Industry</b>	30,056.40	58,526.70	72,778.10	91,254.60	123,412.70	156,877.20	502,849.30
Long and medium term loan (for new projects)	4,046.40	23,852.70	25,336.90	26,996.90	37,066.50	41,585.70	154,838.70
Long and medium term Recurrent expenditure loan (for existing projects)	26,010.00	34,674.00	47,441.20	64,257.70	86,346.20	115,291.40	348,010.60
Service 2/	55,925.10	70,137.00	81,786.80	96,054.70	113,486.70	138,040.00	499,505.20
<b>Client Wise total domestic credit allocation /1/</b>	158,072.30	207,133.30	254,565.70	315,459.10	401,648.60	505,861.80	1,684,668.40
Private sectors	89,627.30	132,603.80	160,193.50	195,412.40	248,141.80	308,307.00	1,044,658.50
Public enterprises	68,445.00	74,529.40	94,372.20	120,046.70	153,506.80	197,554.80	640,009.90

Source: GTP II document (June 2016)

- **Challenges of Project Financing in CBE**

In order to obtain more insight on the findings of the survey, document review was made on actual loan files in Business and Corporate Customers Relationship Management and Commercial Customers Relationship Management wings. Major challenges faced in due course of processing the cases for deliberation is scrutinized. The files were deliberately selected from both approved and declined categories in order to see why approved/declined and the followings were what were observed:

**Table 4.18: Document review Summary**

Bank Specific Challenges	Borrower Specific Challenges	External Challenges
Disbursement delay due to liquidity problem	Due to not completing projects as per the implementation schedule, associated cost overrun from inflation and exchange rate fluctuation are requested to be financed by bank	Due to lack of foreign currency, machineries could and/or raw materials could not be imported hindering project implementation as per the schedule
Loan modification requests such as terms, conditions, tenures		
Interest rate has always been similar for all kind of project loan approved and no commitment change. However, there is article in the contract that give the bank to change interest rate whenever necessary without the need to notifying the borrower	Due to incompleteness of feasibility study presented, repeated back and forth of the files among appraisers, customer relationship manger and customers is observed	Due to government policy, to allocate resource only to selected priority, bank have declined viable projects like mall and real estate and refused to accept for appraising many which are not in the priority list
Contingency is not held while calculating total investment cost rather any cost overrun is conditioned to be borne by borrower in the contract	Majority of presented total investment cost are inflated by more than 25% on average when compared to appraised total investment costs for loan approval. However, this paper undertaker cannot confirm which is correct i.e. either it is due to the applicants' investment cost inflation or bank cost deflation And suggests another study	due to political factors, some of bank financed projects are set on fire
collateral valuation which is claimed below cost has been an issue for appealing against the decision		Due to high interest rate charged by other banks and shorter loan tenure, some of the project loans observed are loan buyouts from other banks
It seems that when the bank finds the project risky or is uncomfortable with, it raises the borrower's equity contribution and/or requests personal guarantee (in addition to business mortgage) from the borrower to mitigate risk but does not vary its interest rate charge	due to various reasons, project is not completed as per the budgeted cost, time and schedule and request for decision modification, additional financing, and rescheduling and restructuring is requested	due to governmental body's various reasons such as not approving plan, claiming "high" charge for service such as registration, condition could not be fulfilled
		In the second GTP CBE is expected to provide credit for public investment projects in infrastructure and working capital for industrial sector.
Loan processing time is also not per the bank's loan delivery time due to customer not fulfilling bank's request for documents and other formalities	not being able to fulfill preconditions set for the first disbursement subsequent phased terms Not being able to contribute equity contribution as per the financing structure	Some projects are declined for the saturation of the market, below cost of capital IRR & negative NPV
	Also management gap in terms of qualification and unrelated qualification	Due to lack of electricity, repeated grace period extension is requested
	Some of the approved project loans are not utilized at all by borrowers due to various reasons such as inability to fulfill conditions or inability to match equity contribution	

Source own summery (May 2017)

The above findings were incorporated in analysis of the survey results.

## **Interviews**

In addition to the data from the structured survey and evidences gathered from the documents, interview was made with Relationship Management and Appraisal wing directors. The officials interviewed concurred with the majority of the survey result found but differed in some and the points they differed on were incorporated in the analysis above. The interview questions are also annexed herewith.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATION**

### **5.1. Summary**

In general, this research was conducted based on the primary and secondary resources. The primary source was obtained from respondents' opinion and view on the challenges affecting project financing. Their responses were taken to be important since they were based on their qualification and experience in the credit process while the secondary sources were document review.

#### **Bank Specific Challenges that Affects Project Financing**

Bank character in terms of ownership and size of the bank were found to be challenges affecting project financing motive in selecting project to be financed and ability to make the required fund available.

Under the credit policy and procedures, dissatisfaction of customers on collateral valuation, unavailability soft product of project financing like consultancy & advisory, unavailability of commitment charge, low and flat interest rate charged, lack of flexibility in the bank's credit policy and procedure were major challenges. Interview results showed contradicting results concerning the last challenge here.

While project appraising, according to the study, the challenges faced were insufficient support rendered to the credit appraisal unit by research unit, not holding contingency cost, lack of practicing team based approach in appraising project requests, lack of support with software that simplify appraisal process, lack of training for credit performers with appropriate frequency and depth, not appraising end-to-end of project, inadequate skill of the credit performers, under-financing and management intervention in loan processing and approval were viewed as challenges in project financing by 65% of the respondents.

#### **Borrower Specific Challenges**

Character of the borrower in terms of un-planned and ambitious business expansion were rated customer related challenge by 94% of the respondent while lack of integrity rated challenge by 87% of the respondents with mean value of 4.10 and 4.05 respectively. Under nature of project,

the average frequency distribution agree (75%) and mean (3.86) of both challenges emphasized on location and economic sector for project financing. Not executing project as per the feasibility's implementation schedule, incomplete and not well prepared feasibility study, low financial strength, under utilization of project's capacity, lack of separation between the project, project promoter, and project management, lack of financial management knowledge, adequacy of an up-to-date risk management plan, not being familiar with the industry, presented in the respondents' mean value in descending order were management problem identified as challenge.

### **External Environment Specific**

Under data/information constraint subcategory-unavailability of independent private/government body that provide relevant data for project financing; lack of properly trained consultants, legal advisors, project managers; and availability of necessary information to appraise the loan at national level were found to be challenges with mean value of 4.1, 3.9 and 3.8, respectively.

Factors related to financial intermediaries surveyed and found to be challenge were not-practicing syndicate lending, non-development of capital market, poor credit culture in the country, and limited capacity in terms of local banks, non-engagement of local banks in consultancy & advisory, and unavailability of various insurance with mean value ranging from 3.3 to 4.1 smallest being for unavailability of insurance cover and the largest for not practicing syndicate lending.

The average frequency distribution of challenges related to economic environment (lack of foreign currency, inflation and economic growth) was 80% response of strongly agree and agree. Concerning political factors-government policy & political factors-the average mean was 4.06 and standard deviation of 0.73 indicating that political environment affected project financing.

The other challenges under infrastructure sub category of external challenges affecting project financing, according to the study, were electric power interruption, information technology/communication, transport facility and water supply with varying magnitude of average mean value 4 and standard deviation of 0.83.

**Table 5.1 Survey Summery**

CHALLENGES		MEAN	Std. D	RANK
CATEGORY	TYPE			
BANK	Bank Character	3.88	1.02	6
	Credit Policy and Procedure	3.54	0.99	10
	Credit Appraisal	3.43	1.06	11
	Credit Approval	3.33	1.01	12
	<b>AVERAGE</b>	<b>3.55</b>	<b>1.02</b>	
BORROWER	Character of the Borrower	4.08	0.69	1
	Project Nature	3.86	0.89	7
	Management Problem of the Project Promoter	3.98	0.87	5
	<b>AVERAGE</b>	<b>3.71</b>	<b>0.94</b>	
External	Data/Information Constraints	3.85	1.12	8
	Financial Intermediaries	3.55	0.93	9
	Economic Environment	4.06	0.73	2
	<i>Political Environment</i>	3.99	0.88	4
	Infrastructure	4.03	0.87	3
	<b>AVERAGE</b>	<b>3.77</b>	<b>0.93</b>	

The external, borrower and bank related challenges rank first, second and third respectively when compared based on mean values but borrower's character scores the highest mean from all individual challenges showing how challenging is integrity and unplanned business/project expansion is.

## **5.2. Conclusion**

It is believed that the main factors affecting economic growth are labor, capital and exogenously determined technology. Capital as a requirement for economic growth is satisfied mainly by the development of financial sector in an economy. CBE as one of the major players in financial sector, finances various projects. Project loans were mostly large amount of loans that should be given great concern by the bank in relation to the country's striving to achieve the growth and transformation plan. However, project financing in CBE had various challenges that was seen from bank, borrower and external angles. With this in mind, this research was undertaken with the objective of assessing the challenges of project financing in CBE.

To materialize this objective, the study used survey in addition to use of secondary sources of information. In this endeavor, factors affecting project financing in CBE were categorized in to bank specific, borrowers' specific and external environment specific.

The major challenges of project financing in CBE classified as bank specific were ownership and size, dissatisfaction of customers on collateral valuation, unavailability of commitment charge, low and flat interest rate, and lack of flexibility in the bank's credit policy and procedure. Credit appraisal related such as insufficient support being rendered by research unit to credit processing unit, not holding contingency cost, lack of training for credit performers with appropriate frequency and depth, not appraising en- to-end of the project; and credit approval related such as under financing & management intervention.

The second category of challenges were borrower specific –characters of borrowers such as un-planned and ambitious business expansion including scope change and project creep and lack of integrity; nature of the project such as location and economic sector of project; management problem such as not executing project as per the feasibility's implementation schedule, incomplete and not well prepared feasibility study, low financial strength, under utilization of project's capacity, lack of separation between the project, project promoter, and project management, lack of financial management knowledge, low risk management plan, not being familiar with the industry.

With regard to the third category-external environment specific, data/information related such as independent private/government body that provide relevant data for project financing, lack of properly trained consultants, legal advisors, project managers; financial intermediaries related such as not practicing syndicate lending among banks, non-development of capital market, poor credit culture in the country, and limited capacity in terms of capital, liquidity and project financing practice of local banks, non-engagement of local banks in soft product of project financing such as consultancy & advisory and unavailability of various insurance; economic environment(lack of foreign currency, inflation and economic growth); political factors-government policy & political factors; infrastructure such as electric power interruption, information technology/communication, transport facility and water supply were identified challenges.

In nutshell, bank specific challenges affecting project financing were bank related (character of the bank, credit policy and procedure and credit appraisal & approval), borrower specific (character of the borrower, nature of the project and management problem of the project promoter) and external environment specific (data/information, financial intermediaries, economic & political environment and infrastructure).

### **5.3.Recommendation**

Based on the analysis made in this study, the following recommendations are made.

- The bank should review its collateral valuation manual and follow an approach that minimizes the gap between the borrowers' actual investment and the bank's estimation by employing available alternative valuation method instead of the existing one which the cause for dissatisfaction.
- The bank should strengthen the existing once and broaden and diversify its foreign currency earnings mechanism to be able to avail the required amount of foreign currency on time for projects it finances. It should also increase its capital and maintain the good effort of deposit mobilization in order to be able satisfy the growing demand for project financing from the country's endeavor for growth.
- The bank should review its project loan pricing including collecting commitment charge to make it competitive with the industry by being remunerated at rate consistent with the degree of risk inherent in the venture concerned thereby increasing its revenue and mitigate risk. It shall also incorporate contingency cost in calculating total investment cost structure to practice international standard and minimize repeated request for additional financing.
- Using various outlet such as customer day, print and electronic media, the bank shall make awareness creation campaign to create good credit culture for the existing and potential customers and requirements needed to be fulfilled, the prudence the borrower need to take when applying for project financing request.

- The bank should use various covenants in the loan contractual agreements with objective of controlling the borrower from failing to abide by the approved project scope and financial structure and other terms and conditions making sure to the customer in advance not adhering to it strictly will be translated as default and should not wait until customer fails to repay
- The bank , as learning entity, should gather, store, retrieve and make use of information and benefit from economy of scale of information and work closely with other governmental bodies providing relevant information in orders to establish strong research unit. It shall also benefit from providing soft product of project financing by creating separate unit for consultancy and advisory service; thereby closing the gap in the market and utilizing the economy of scale in information it need to maintain.
- The government should make the economic environment conducive and the required infrastructure available in order create favorable atmosphere for project financing and implementation

### **Limitation of the Study**

It would be more consequential, if the project financing of districts could be included in the study, though the study will also be caught up by time and cost limitations. Therefore, the findings from the assessment will be limited to the study area and the conclusions to be found may not possibly represent the rest of the eleven districts of the bank which were not bounded by this study.

Furthermore only credit performers and two directors who have direct day to day relationship to the project financing were included in collecting primary data. The borrowers, policy makers, government authorities and other parties who impose part of the challenges and affect project financing were not included due to various limitations.

### **Direction for Future Study**

Due to various limitation, the researcher has not undertaken the other side of the research topic i.e. what prospect does CBE has in project financing. This research has also not incorporated in the survey the opinion of the actual and potential customers and various stakeholders. Hence,

futures studies have the opportunities of bridging these gaps; in addition to deepening their study on a single issue of project financing challenges to measure the actual impact and subsequent solution.

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# **ANNEX**

**ANNEX-I**  
**ADDIS ABABA UNIVERSITY**  
**SCHOOL OF COMMERCE**  
**DEPARTMENT OF PROJECT MANAGEMENT**

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**QUESTIONNAIRE FOR RESEARCH THESIS**

**Dear respondents,**

This questionnaire is prepared to obtain information from key informants with structured questions. The information is required for the academic research entitled “Assessment on the Challenges of Project Financing: a case Study of Commercial Bank of Ethiopia”, which is being conducted as partial fulfillment of the requirements for the award of Masters of Arts Degree in Project Management.

The objective of the research is to identify the main challenges that affect Project Financing, and make recommendations based on the findings. The questionnaire consists of four parts. Part I consists of basic attributes of the credit performers/respondents; Part II is about the Bank Specific Challenges); Part III contains Borrower related challenge; and Part IV- contains External Challenges). At the end space is left for general comments or additional challenges to be stated.

Your response, in this regard, is highly valuable and contributes to the outcome of the research. All feedback will be kept strictly confidential, and will be utilized for this academic research only.

Thank you in advance,

Berhanu Kassahun

Tele. No. 0115 15 02 59 or

Ext. 120

## **Part -I**

### **Basic attribute of the Credit Performer**

Please indicate your responses by circling your choice

#### **1. Your current position in the Bank**

- 1) Credit Director
- 2) Customer Relationship Manager
- 3) Credit Appraisal Expert
- 4) Credit Analyst
- 5) Other, please specify \_\_\_\_\_

#### **2. Your experience in the Banking Industry**

- 1) 0-5 year2) >5 but  $\leq$ 10 years
- 3) >10 but  $\leq$ 15 years
- 4) Above 15 years

#### **3. Your experience in the Bank Project Finance Process**

- 1) 0-5 years
- 2) >5 but  $\leq$ 10 years
- 3) >10 but  $\leq$ 15 years
- 4) Above 15 years

#### **4. Your Educational Background**

- 1) PhD
- 2) Masters Degree
- 3) Bachelor Degree
- 4) Diploma
- 4) Others, please specify \_\_\_\_\_

## **Part II – IV**

Please provide your agreement level by putting a tick mark ( $\surd$ ) to the options- “strongly disagree”, “disagree”, “neutral”, “agree” and “strongly agree” the respective column for each factor in the raw.

<b>Part II</b>	<b>Bank Specific Challenges for Project Financing in the case of Commercial Bank of Ethiopia</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
	<b>Characteristics/Nature of the Bank</b>					
	Ownership(public/private) type of the Bank					
	Size of the Bank in terms of asset, capital, liquidity					
	<b>Credit Policy and Procedure</b>					
	Lease financing can ease and alternatively be used in place of project financing					
	dissatisfaction of customers on collateral valuation					
	Lack of flexibility in the bank's credit policy and procedure					
	Low and flat interest rate charged by the Bank that does not depend on various risk factors					
	unavailability of commitment charge					
	Unavailability soft product of project financing like consultancy, advisory in order to utilize their economy of scale in information					
	<b>Credit Appraisal Related</b>					
	Inadequate skill of the credit performers to appraise project loan					
	Lack of understanding of scope of the project					
	Lack of training for credit performers with appropriate frequency and depth					
	Insufficient loan processing time					
	Insufficient support being rendered by research unit to credit processing					
	not matching the project income with debt servicing at the time of credit sanctioning					
	not-practicing team based approach in appraising project requests					
	support with software that simplify appraisal process					
	Not appraising end to end of the project(incorporating in the appraisal report all parties supposed to be involved in the project-contactors, suppliers, operators and end product buyers)					
	Weak credit assessment on the market, technical, economic and environmental feasibility of the project					
	while appraising project cost, contingency is held for unanticipated costs to be incurred					
	while appraising project cost, contingency should be held for unanticipated costs to be incurred					
	<b>Credit Approval</b>					
	Management intervention in loan processing and approval					
	over financing					
	Under financing					

<b>Part III</b>	<b>Borrower related challenge Affecting Project Financing in the case of Commercial Bank of Ethiopia</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly disagree</b>
	<b>Character of the Borrower</b>					
	Lack of integrity of the borrower					
	Un-planned and ambitious business expansion					
	<b>Nature of the Project</b>					
	Economic sector of the business					
	Location of the project					
	<b>Management Problem of the Project Promoter</b>					
	financial strength					
	Legal structure of the company (sole proprietorship, PLC, S.Co.)					
	familiarity with the industry					
	Incomplete and not well prepared feasibility study presented by the project promoter					
	Adequacy of an up-to-date risk management plan					
	lack of separation between the project, project promoter, and project management					
	Financial management knowledge					
	not executing project as per the feasibility's Implementation Schedule thereby delaying the project and incurring cost overrun					
	Not integrating the project end to end with parties such as contractor, suppliers, operators, purchasers with contract based commitments at the outset					
	under utilization of project's capacity due to various reasons such as lack of market, raw material, FCY					
<b>Part IV</b>	<b>External Challenges Affecting Project Financing in the case of Commercial Bank of Ethiopia</b>	<b>Strongly agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Disagree</b>	<b>Strongly disagree</b>
	<b>Data or Information</b>					
	availability of necessary information to appraise the loan at national level such as National Bank of Ethiopia, Central Statistics Authority, Ministry of Industry, Investment Office, etc.					
	Lack of properly trained consultants, legal advisors, project managers					
	unavailability of independent private/government body that provide relevant data for project finance tracking industry each industry					
	<b>Financial Intermediaries</b>					
	unavailability of various insurance cover such as commercial, political, agricultural, currency devaluation etc					
	non-engagement of local banks in soft product of project financing like consultancy, advisory in order to utilize their economy of scale in information					
	limited capacity in terms of capital, liquidity, and project financing practice of local banks					
	non-development of capital market					
	not practicing syndicate lending among banks					
	Poor credit culture in the country					
	<b>Economic Environment</b>					
	Economic Growth					
	Inflation					
	Lack of Foreign currency					
	<b>Political Environment</b>					
	Government Policy					
	Political Factors					

	<b>Infrastructures</b>					
	Electric Power Interruption					
	Information Technology or communication					
	Transport Facility					
	Water Supply					

**Part V**

**What other bank specific Challenges affects Project Financing in Commercial Bank of Ethiopia**

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**What other customer specific Challenges affects Project Financing in Commercial Bank of Ethiopia**

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**What other external Challenges affects Project Financing in Commercial Bank of Ethiopia**

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## ANNEX II

### Interview Guide Lines

1. Do you think there are challenges that affect project financing and if so, what are the majors once?
2. Do you think that the bank's policy and credit procedure is inflexible and pauses a challenge to project financing
3. Do you think there is a team based approach to handling project financing requests
4. Does CBE has organized information center that that provide required information in its endeavor of project financing
5. Do you thing that the availed project processing time is enough to process requests carefully
6. Is there complain on collateral valuation suggesting that the valuation does not consider the market price of building material, labor and service costs?
7. Does CBE get the required information from various government organs to help it appraise various project financing request
8. Why does CBE charge low, compared to other banks, and similar interest rate for all projects indifferent of the risk associated with each