CRITICAL SUCCESS FACTORS FOR PROJECTS FINACED BY DEVELOPMENT BANK OF ETHIOPIA: THE CASE SMALL AND MEDIUM ENTERPRISE LEASE FINANCING

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Declaration

This research paper and the work that is presented on it under the title "Critical Success Factors for Projects Financed by Development Bank of Ethiopia: The Case of for Small and Medium Enterprise Lease Financing" is the original work of the researcher, had not been presented for a degree of masters in any other university, in any projects by any means, and all the source materials used for this thesis has been accordingly acknowledged.

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  Samuel Sirak Endalew   Date

This is to certify that the declaration made by the candidate is correct to the best of my knowledge.

_____ . _____ .

  Dakito A. (PHD)   Date

ADDIS ABABA UNIVERSITY

SCHOOL OF COMMERCE

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Abbreviations:

DBE: Development Bank of Ethiopia

CSFs: Critical success factors

LF: Lease Financing

CGPSD: Capital Goods procurement and Supply Directorate

PIP: Project implementation profile

PM: Project management

PMBOK: A guide to Project Management Body of Knowledge

PLCM: Project life cycle model

SME: Small & Medium Enterprises

KYC: Know your customer

FDRE: Federal democratic Republic of Ethiopia

PNR: project Nature related Success factor

PMRF: project management relates success factor

SR: supplier related success factor

OR: organization related success factor

PMR: project management related success factor

CR: client/lessee related success factor

PACR: procurement and contract related success factor

BEAWR: business and work environment related factor

PCA: Principal Component Analysis

Abstract

Development bank of Ethiopia is the main strategic government bank starting from 1902 E.C. This particular study asses the CSFs that have a significant impact on SME projects that are financed by DBE through a lease financing loan modality where, CSFs are in short the areas of a typical business or project that are important to its success. A variety of relevant literatures have been discussed 39 variables identified, and a conceptual framework of the study is developed. The study used descriptive and explanatory research design, gathered data from development bank of Ethiopia employees who are involved in lease financing program. Theoretical aspects of the study is discussed and conceptualized by using the secondary data. Furthermore; the quantitative data is analyzed by SPSS 26.0 software, where, PCA statistical estimation technique is employed and also the data is tested for reliability adequacy and significance. Explanatory factor analysis of the study validate the already identified 8 CSFs labeled as project nature, project management, procurement and contract, organization, client/Lessee related factors, work and business environment, supplier, and project manager related factors. The findings of the study suggested that, work and business environment and supplier related factors as the most important factors while, procurement and contract related factors as a least important factors. On the other hand; the correlation matrix output of the study indicates, in addition to these factors contribution to projects success they have also a significant relationship each other where one factor influence the output of another. The findings of this study also indicated that DBE must allocate adequate resources and must give uninterrupted attention to the subject of CSFs due to their importance, furthermore; skill development programs for employees were found to be critical for DBE projects success.

Keywords: Critical Success Factors, Small and medium Enterprises, Lease Projects Financed by development Bank of Ethiopia.

Chapter One

1. Introduction

1.1. Background of the Study

Development banks around the world has increased rapidly in the1950s, with the intention to provide medium to long-term funding for productive investment in developing countries, the banks also usually supplement their funding by technical assistance. During the era the International Bank for Reconstruction and Development and its affiliates have supported them. One of the most recognized Inter-American Development Bank, is founded in 1959; the Asian Development Bank, which started operations in 1966; and the African Development Bank, established in 1964, are among the main regional development banks. Some of the development banks make loans to private or public bodies for particular national or regional ventures or may work in collaboration with other financial institutions. One of the key activities of development has been the recognition and promotion of private investment opportunities, while most development banks' activities are geared towards the industrial sector, some are also concerned with agriculture. (Chris Hmphery (2015) & Nicholas Bruck (1998)). Development bank of Ethiopia is the main strategic government bank in Ethiopia starting from 1902 E.C specialized to spur the national development agenda through project and lease financing modalities.

Ethiopian government strategized a special funding program for projects belong to Small and medium enterprises (SMEs) because SMEs are central to economic development, particularly in emerging markets. The government of FDRE grants DBE to provide the financing opportunity owing to the need to accelerate the growth and development of SMEs by facilitating access to finance through availing working equipment and machineries to enterprises, the government of Ethiopia has laid major enabling legal & regulatory frameworks such as the enactment of Proclamation no. 103/1998 and its amendment proclamation no 807/2013 on Capital Goods Leasing Business, Directive no. CGEB 102/2013 for the Licensing of Capital Goods Finance Service by the National Bank of Ethiopia (NBE) and Capital Goods Lease Business Registration and Supervision Directives no. 001/2007 by Ministry of Trade are in place. However; from the time of the program launching year 2015 up-to June 2020, from the total amount of 16.5 billion birr projects only a total amount of 4.2 billion 25.4% of projects are disbursed and only 310.4 billion birr or 7.4% loan is collected. Thus; it is the researcher believe identifying the CSFs for this particular financing practice and projects is essential for the success of the program.

Critical success factors in short are the areas of a typical business or project that are important to its success. Identifying and communicating CSFs within businesses, organizations and projects is essential to ensure that the business or project stays focused on what needs to be done to achieve success or its intended objective. However; CSFs are not similar or does not have standardized list which can be applied across all projects or business organizations, as Yang, Shen & Ho (2009), explained that, due to the unique nature of projects dictates that critical success factors identified in one project cannot be directly transferred to other project. Thus; it is critical for every business organization or project to identify, make systematic analysis, figure out the intra-relationship among the CSFs and focus on them during implementation that is specific and particular to its objectives so as to increase the chance of success. Dealing with critical success factors requires understanding of concepts that are related to project, project management, project success and the typical nature of the CSFs itself.

This particular project work aim is to study the CSFs for SME projects financed by development bank of Ethiopia through capital goods leasing, with a general objective to identify and asses CSFs that have an influence or impact on the successes of SME projects financed through capital goods leasing by DBE. Furthermore; the study also aimed at providing a model to help improve SME lease project success rates in DBE. It seeks to realize that by identifying and analyzing the Critical Success Factors (CSFs) that are specific to projects in DBE, which might inform project planners in project formulation, guide in planning, and improve project implementation efficiency that could lead to cost reduction.

1.2. Problem Statement

Development bank of Ethiopia is one of the state owned financial institutions, which has clear mission of accelerating the national economic development. DBE is mandated by the government of FDRE with several tasks so, it can meet its predetermined objectives. The bank is mandated; to provide medium and long term investment credit as well as short term loans to viable projects, to mobilize funds from sources within or outside the country, to manage funds entrusted to it, to participate in equity investments, to provide domestic and foreign banking service to its borrowers, to accept time deposit, to guarantee loans and other financial obligations, to draw, accept, discount, buy and sell bills of exchange, drafts and promissory notes payable within or outside Ethiopia, to issue and sell bonds, to act as trustee, to provide technique and managerial service, to open and

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operates bank accounts with banks and banking correspondents in Ethiopia or abroad, and to engage in such other activities as is customary carried out by development banks.

As we can see from DBEs mandates the bank is responsible to provide short term loans, medium term and long term credit for viable projects and investments based on the priority sectors that, the government identifies to accelerate the national economic development. To accomplish this major mandate DBE uses two types of financing; the first one is "project financing" modality which consists cost share financing or low interest loan financing, debts financing and equity financing for local and foreign investors. The second financing modality is in kind project financing or "capital goods lease financing" which is designed to serve only local SMEs where the bank facilitates access to finance through availing working equipment and machineries to these enterprises. However; (Belay Teferra (2017) and Iba Shiferaw (2018), research mentioned that, DBE financed projects frequently fail to achieve their goals due to several problems that could be imperfect project design, poor stakeholder management, delays between project identification and start-up, delays during project implementation, cost overruns, coordination failure, etc.

Mobey and Parker (2002), suggested that, organizations must first have a clear understanding and should identify the CSFs, analyses them systematically and quantitatively, anticipate potential effects, and finally choose appropriate methods of dealing with them primarily so the probability of their projects success can increase significantly. Similarly; the study conducted by Kuen (2006) on the CSFs subject suggested that, projects have a specialized set of critical success factors that, if addressed and prioritized, increase the likelihood of successful implementation.

Even if, the failure of projects financed by DBE is manifested in both financing schemes; this particular research will only focus on the second type of modality which is "capital goods lease financing", so as to identify and explore the CSFs for these financed SME projects. The research also intends to show areas the bank should focus for the success of the program and to add a positive value in the bank operation, so it can achieve one of its major mandated objective.

The June 30, 2020 DBEs report on the overall performance of lease activity from its inception of the program in 2015 indicates that, the Bank has received 2,318 lease applications amounting to birr 16.5 billion, but the approved number of projects is only 1,317 (56.8%) which is amounted at birr 9.2 billion or 55.7%. And from the total approved amount of 9.2billion birr the disbursed amount is only birr 4.2 billion which is 45.6%. Similarly; the report also mentions the lowest performance registered by the financing modality by indicating that, the collected amount of

finance from clients which is only birr 310.4 million or 7.4%. Thus; we can conclude that DBEs project financing performance through this particular modality is significantly low starting from project application up-to loan collection. Therefore, this study will tried to identify those critical factors that affect the success of projects financed by the Development Bank of Ethiopia through lease financing modality.

1.3. Research Question

The study will try to address the research problem considering the core and fundamental questions raised by the research.

1. What are CSFs that have a significant impact on the success of lease financed SME projects by DBE?
2. How many possible class of CSFs/variables can significantly influence lease financed SME projects by DBE?
3. What kind of possible inter-relationship can be manifested by these CSFs of lease financed SME projects by DBE?

1.4.   Objectives

1.4.1. General Objective

The general objective of this particular research paper is to identify and asses CSFs that have an influence or impact on the successes of SME projects financed through capital goods leasing by DBE.

1.4.2. Specific Objective

1. To identify DBEs lease financed projects critical success factors from literature and grouped them into eight categories.
2. To assess the relationship between eight factors namely project nature related factors, project management related factors, procurement and contract related factors, organizations related factors, project owners related factors, project manager related factors, suppliers related factors, business & work environment related factors and DBEs lease financed projects success.
3. To examine the inter-relationship between the CSFs that influence the success of DBE lease financed Projects.

1.5.Scope of the Study

The scope of this research project is to identify and discuss the critical success factors for SME projects that are financed through capital goods leasing by DBE. Furthermore; the study will explore the empirical relationship between the specific SME projects CSFs with regard to stakeholder's attitude towards the financing modality and with the policy that is in practice. The research intended to focus on literature reviews, capital goods leasing policy and questionaries' survey. The research will participate different stakeholders (the bank staff) of the financing process i.e. 1) customer service and management offices in a district and directorate level, 2) SME project appraisal and approval teams in district level, 3) capital goods procurement and supply directorate, 4) lease financing follow-up directorate, 5) international banking directorate of DBE, as these core entities of the bank are responsible for all SME lease financed projects from accepting requests up to delivering the capital goods in their fully operational form and until the clients fully pay back their loan.

1.6.Significance of the Study

The research intended to identify the critical success factors that have significant influence on SME lease financed projects, so that the bank can recognize them and possibly can take measures with the aim of improving the success of projects financed through this modality; by helping projects to be completed within budget, schedule and the required level of quality to satisfy the banks client. Also the study has a significance in addressing the important drawbacks to the bank specifically in this modality that has not been explored before by other researches. In addition; the research will also provide information's that future researchers may require, corporate managers and policy makers, generally; any stakeholders who wish to study on this topic can use the information this research can provide.

1.7.Limitation of the study

This particular study conducted on development bank of Ethiopia SME lease financing loan modality. The findings of the study can only represent projects that are financed by providing them with capital goods in DBE, thus; the conclusions made by the study might not apply to other projects financed by other modalities of loan in DBE or other banks in Ethiopia due to the unique nature of SME projects. Larger study is needed and it will be more appropriate for the generalization of the findings to the entire Banking Sector Projects in Ethiopia.

1.8.Organization of the study

This particular study content is divided into five major chapters. The first chapter discuss information's related to introducing the study, the problems and concerns that lead for this study as well as objectives and approach of the study. The second chapter discusses a detailed information's that are relevant to the study in the form of theoretical and literature review. The third chapter of the study contains detail information's on the study research methodology and the tools used by the research. The forth chapter of the study is all about data presentation and data analysis but most of all the chapter focuses on findings interpretation and result discussing. This typical study closes with the fifth chapter and it contains summary of the study findings and recommendations made by the study based on its findings.

Chapter Two

2. Review of related literature

The intention of the research is to identify the critical success factors (CSFs) that have a potential to influence or impact the success of SME projects financed through capital goods leasing modality by development bank of Ethiopia (DBE). Thus; the literature review will discuss ideas related to a project, concept of project management and project success as well as what capital goods leasing and will make introduction to critical factors for project success.

2.1. Theoretical Literature Review

2.1.1. Project

Different scholars and literatures define and understand a project in different context, the variety of definitions provided by this scholars and literatures can give us a complete concept about a "project". Based on British standard (BS 6079 'Guide to Project Management') project is a unique set of coordinated activities, with definite starting and finishing points, undertaken by an individual or organization to meet specific objectives within defined schedule, cost and performance parameters. The other scholar Newman et. Al (2011) define that project as "a typically has a distinct mission that it is designed to achieve and a clear termination point the achievement of the mission".

The 5rd edition of PMBOK (A guide to Project Management Body of Knowledge) defines a project as a "temporary endeavor undertaken to create a unique product, service, or result," based on this description unique product, service, or result; Projects are undertaken to fulfill objectives by producing deliverables. Where, an objective is defined as an outcome toward which work is to be directed, a strategic position to be attained, a purpose to be achieved, a result to be obtained, a product to be produced, or a service to be performed. A deliverable is defined as any unique and verifiable product, result, or capability to perform a service that is required to be produced to complete a process, phase, or project. Where, deliverables may be tangible or intangible. From the above definitions we can understand that all the attempts are circulated around the concepts of time, scope and endeavors to indicate starting and ending, defined set of objectives and complex set of activities respectively to characterize a project. Nerveless; even different literatures and scholars define a project in a different manner all of the definitions circulate around and used three important concepts as a 'defined start and end,' 'common objective,' and 'complex set of activities' to define a project.

2.1.2. Project management

(A K Munns and B F Bjeirmi, 1996 define project management as "the process of controlling the achievement of the project objectives. Utilizing the existing organizational structures and resources, it seeks to manage the project by applying a collection of tools and techniques, without adversely disturbing the routine operation of the company."

According to "A Guide to the Project Management Body of Knowledge, PMI, Third Edition", "Project management is the application of knowledge, skills, tools, and techniques to a broad range of activities in order to meet the requirements of a particular project".

The ISO 10006, a standard for quality in project management defines it as; "Unique process consisting of a set of coordinated and controlled activities with start and finish dates, undertaken to achieve an objective conforming to specific requirements, including constraints of time, cost and resources".

PRINCE2, the UK standard for project management, has this definition: "a temporary organization that is needed to produce a unique and predefined outcome or result at a pre-specified time using predetermined resources". IPMA, the International Project Management Association, defines a project as "a time and cost constrained operation to realize a set of defined deliverables up to quality standards and requirements". In other words, project management is the planning, implementing, and monitoring of project activities to meet project objectives, achieved by effectively controlling and balancing the constraint of time, cost, and scope in producing quality deliverables that meet or exceed the expectations of the project stakeholders.

As we can understand from the above definitions of "project management" they intended to lean to "success" of project objectives explanation approach.

2.1.3. Project success

Before we discuss about the critical success factors CSFs it is important to understand what do we mean by a successful project is, Pinto and Slevin, (1988), state "There are few topics in the field of project management that are so frequently discussed and yet so rarely agreed upon as the notion of project success". However; it is important for this particular research to define a reasonable definition regarding a successful project.

Pinto & Slevin (1988), define the 'project success' not only meets cost, schedule, and performance requirements based on their research conducted with over 650 project managers but also includes fulfillment of more complicated requirements, such as customer satisfaction. The other notable

concept was claimed by Thomas, Jacques, Adams & Kihneman-Woote (2008) which, states that measuring project success in not straightforward: "Examples abound where the original objectives of the project are not met, but the client was highly satisfied. There are other examples where the initial project objectives were met, but the client was quite unhappy with the results." (Prabhakar, 2008) strengths Thomas, Jacques, Adams & Kihneman-Woote claim by stating that, the achievement of customer satisfaction along with the end result that has a critical effect on the perceived success or failure of projects.

However; scholars like Cooke-Davies (2002) makes another point referring that, there is a difference between project success and project management success. Meeting the cost, scope, timeline requirements may not mean the project is seen as successful in the long term by the organization. And, another prominent scholars Shenhar, Dvir, Levy and Maltz (2001) tried to define project successes by categorizing it into four levels of project success: as Project efficiency, Impact on the customer, Business success, and preparing for the future.

For the purpose of this research, we will further explore the concept raised by Cooke-Davies (2002), pointing a similar explanation by De Wit (1988) describes project success as the measurement of project outcomes against costs, time and quality. He points, however, to a distinction between the project success and the project management, success. He believes this two closely related terms must be differentiated. He explained that, project success is related to overall achievement of project objectives and goals; while clams project management success is measured based on the fundamental criteria or restrictions for success and concluded that, "Good project Management can lead to project success, but it is unlikely to prevent project failure".

The other important concept that can strength the aim of this research is raised by Müller and Turner, (2012), which determines success criteria and critical success factors (CSFs) as a constituents of project success. Where, Project success criteria can be taken as the dependent variables (principles, measures, standards) that assess and evaluate a project's successful outcome, while project success factors are the independent elements of a project (set of conditions, facts, elements, and influences) that can increase the likelihood of success. Generally; the above concept is telling us that, in order to measure success, success criteria are used while success factors promote the achievement of success. Furthermore; Mobey and Parker (2002), argue that to increase the possibilities of a project succeeding it is necessary for the organization to possess an understanding of what are the critical success factors, to systematically and quantitatively assess

these critical factors, anticipating possible effects, and then choose appropriate methods of handling them. Once identified, the successes of the project are often achieved.

As we can see from the above literatures and concepts regarding a "project success" we can conclude that the concept is highly subjective, complex and relative to the subject matter that the parties involved. But; the literatures that we will focus and utilize for the purpose of this research must align with our scope and the researcher believes the definition by the Project Management Institute (2013)" which defines "project success as meeting project objectives within specific time, cost, and quality constraints while also satisfying end beneficiaries and key stakeholders" summarizes and satisfies the purpose.

2.1.4. Critical success factors (CSFs)

In order to have a clear understanding what CSFs, it's logical to define the raw definition of the terms "critical" and "success" based on (Davis, 2006) critical can be defined as "to work with creating joint pictures of where you are going, what goals and visions you have, as well as creating an ability to think together, regardless of your background or personal goals" and based on (H. Kerzenr & V. Ghyoot 1983) is more specific and states "the term Success has different meaning to various people associated with project. The project engineer may view success as an end-product which performs perfectly, while an accountant may view success in terms of the lowest possible expenditure on the project. The project manager, on the other hand, could interpret success as the timeous delivery of product which confirms to the minimum standard specified, with costs as close to the budget as possible".

CSFs as a concept was first introduced by McKinsey & Co.'s D. Ronald Daniel in the 1960s, then John F. Rockart an organizational theorist and senior lecturer at MIT's Sloan School of Management further expanded and popularize the concept after a decade.

As their name represent "Critical success factors" are straightforward and important, in a more general approach CSFs can be understood as the elements of an organization or project that are vital to its success. However; the term has been adopted for a verity of proposes (David, 2006, 38). In order to have a better understanding of this different purposes of the CSFs let's explore different definitions and concepts adopted by different researchers.

- Bullen & Rockart (1981) "CSFs are the limited number of areas in which satisfactory results will ensure successful competitive performance for the individual, department or

organization. CSFs are the few key areas where "things must go right" for the business to flourish and for the manager's goals to be attained."

- Belassi and Tukel's (1996) CSFs are "Factors from the outside environment over which management has no control that can determine the success or failure of a project"
- Chen (2011) CSFs are "Input factor to the management system that leads to the success of a project or business, either directly or indirectly".
- Vu Nga (2007) "the set of circumstances, facts, or influences which contribute to the project outcomes"

Defining the CSFs in a particular project or organization will help managers and executives to identify and isolate the important issues that they should concentrate and give attention. CSFs will help organizations to achieve success by pinpoint the major factors that their company can specialize, because they can be conveyed easily to the parties involved so monitoring can be achieved easily and can also be used for strategic planning with the organizations choice of methodology easily.

(Jugdev and Müller, 2005) mentioned that, in 1970s-1980s as a response to project success indicators at the implementation level, focusing on time, cost, and quality, as well as stakeholder satisfaction was discussed instead of CSF requirements. However; Pinto and Slevin (1987) first introduced a comprehensive set of CSFs linked to the success of project implementation, they propose a PIP model (project implementation profile) which consists ten CSFs. Which are shown in the following table.

Table 1: The ten PIP model of CSFs

S/r	CSF	Description
1	Understanding Project Mission	Implies understanding of goals and objectives.
2	Top Management Support	Refers willingness of top management to provide the necessary resources and authority/power for project success;
3	Project Schedule/Plans	Reflects the availability of a detailed specification of the individual action steps required for project implementation;
4	Client Consultation	Implies, Communication, consultation, and active listening to all impacted parties;
5	Personnel	Refers recruitment, selection, and training of the necessary personnel for the project team.
6	Technical Tasks	Represent, the availability of the required technology and expertise to accomplish the specific technical action steps.
7	Client Acceptance	It is the act of "selling" the final project to its ultimate intended users.

S/r	CSF	Description
8	Monitoring and Feedback	Refers, timely provision of comprehensive control information at each stage in the implementation process
9	Communication	Implies, the provision of an appropriate network and necessary data to all key actors in the implementation
10	Troubleshooting	Refers, the ability to handle unexpected crises and deviations from plan.

Figure 2.1. The PIP model

Figure 1: The PIP model

2.1.5. Project Lease financing (SME lease financing in Ethiopia)

Small and medium enterprises (SMEs) are central to economic development, particularly in emerging markets. In Ethiopia, recognizing this importance, although the government continues to shore-up its support, there is a clearly observable and all-out effort by banks, insurance companies and microfinance institutions to attend to the ever changing and growing needs of the small and medium sized enterprises (SMEs), dissatisfaction is still prevalent. The study by the World Bank (2015) on SME finance in Ethiopia reveals that only 3% of small enterprises and 23%

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of medium have a loan facility or a line of credit mainly due to extremely high value of collateral needed for a loan corresponding to 249.3% and 253.5% of the loan for small and medium enterprises, respectively against a Sub-Sahara African (SSA) average of 160%.

Among the alternative sources of financing for SMEs, leasing has been effective in several countries in overcoming barriers posed by interest rate ceilings and collateral requirements in conventional commercial bank lending programs (The World Bank, 1997 & 2015). Leasing is a means of delivering finance through a contract where the lessor provides an asset to the lessee to use for a specified period of time with specified payments.

Owing to the need to accelerate the growth and development of SMEs by facilitating access to finance through availing working equipment and machineries to enterprises, the government of Ethiopia has laid major enabling legal & regulatory frameworks such as the enactment of Proclamation no. 103/1998 and its amendment proclamation no 807/2013 on Capital Goods Leasing Business, Directive no. CGEB 102/2013 for the Licensing of Capital Goods Finance Service by the National Bank of Ethiopia (NBE) and Capital Goods Lease Business Registration and Supervision Directives no. 001/2007 by Ministry of Trade are in place. This financing modality is believed to inspire and support entrepreneurs, individuals, private companies, and cooperatives to take part in the development activity so that the aggressive movement towards industrialization is achieved by the concerted and coordinated effort of the society.

There are three types of leases; finance lease, operational lease, and hire purchase lease and following this in 2015, the government has mandated the Development Bank of Ethiopia with mission of financing capital goods for Small and Medium Enterprises (SMEs) on hire- purchase modality.

High level Map-Lease financing process flow-Process owner overview

Branch (A,B,C)	District	CGPSD

Process

Branch (A,B,C):
- Customer sourcing
- Application, Proforma and document receiving & screening
- Request And feed back
- Due diligence check
- Due diligence pass/fail? — Pass / Fail
- Lease appraisal as per sanction limit
- Appraisal pass/fail? — Pass / Fail
- Approval pass/fail?
- Lease approval
- Lease followup, collection

District:
- Proforma evaluation & legal comments
- Lease Appraisal
- Appraisal pass/fail? — Pass / Fail
- Lease approval
- Approval pass/fail?
- Initiate capital goods procurement request? Make corrections
- Sign an agreement with client

CGPSD:
- Perform final PI evaluation and revision
- Is the PI accepted for procurement/any confirmations needed? — NO
- Perform machinery procurement
- Machine delivery, Installation and commissioning

Figure 2: DBEs Lease Financing for SMEs Process flow

Since, the research will focus on the SME projects financing in DBE, it is important for us to understand the process flow of the financing operation in the bank and the performance of the program so far. The above diagram is prepared based on the information gathered from DBE

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CGPSD operation and procedure manual. And, the following table shows overall lease application, approval, and disbursement and collection performance by economic sector in development bank of Ethiopia.

Table 2: Lease financing performance from inception to June 2020 (in '000 birr)

S. N	Economic Sector	Application		Approval		Disbursement	Collection
		NL	Amount	NL	Amount	Amount	Amount
1	Manufacturing	639	4,514,203.83	396	2,300,052.85	1,992,471.46	78,832.32
2	Mining & Quarries	525	4,259,245.44	261	2,361,446.22	986,449.57	82,740.27
3	Agriculture	358	3,155,281.59	215	1,770,389.82	355,853.52	59,228.98
4	Agro-processing	286	2,046,200.26	206	1,440,863.18	531,659.56	51,639.83
5	Construction Materials Manufacturing	347	1,702,257.94	131	756,908.57	197,351.52	23,211.93
6	Agricultural Mechanization	102	632,036.27	67	411,492.28	65,122.76	10,414.01
7	Tour operation	61	262,420.34	41	158,309.07	44,823.17	4,383.23
	TOTAL	**2,318**	**16,571,646**	**1,317**	**9,199,462**	**4,173,732**	**310,451**

Source: LFFD, Report on the Overall Performance of Lease Activity from Inception until June 30, 2020

As presented in the table above, from the date of launching Lease Financing Service in March 2015 until June 30, 2020, the Bank has received 2,318 lease applications amounting to birr 16.5 billion, but the approved number of projects is only 1,317 (56.8%) which is amounted at birr 9.2 billion or 55.7%.And from the total approved amount of 9.2billion birr the disbursed amount is only birr 4.2 billion which is 45.6%. the lowest performance is indicated on the collected amount which is only birr 310.4 million or 7.4%. We can conclude that DBEs project financing performance through this particular modality is significantly low starting from project application up-to loan collection.

2.2. Empirical Review

According to (Pinto and Prescott, 1988, Finch 2003, and Hyvari, 2006) various studies used the ten CSFs of project implementation system (PIP) as model for different types of projects, however; Pinto and Slevin. Finch (2003) also mentioned that not every factor involved in project management is going to be covered by variables defined by PIP model. Other Similar studies conducted during 1990s&2000s as of (Jugdev and Müller, 2005) integrate the difficulty of

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stakeholders also as interactions between internal and receiving organizations as factors crucial to the success of a project. And another scholar Finch (2003) suggests that, a variety of critical external factors influencing the success of a project aren't taken under consideration within the PIP model like the political activities within the organization, competence of the project manager, external organizational and environmental factors, and responsiveness to the perceived need of project implementation.

In 1996 Belassi and Tukel conducted a critique research on earlier studies, which primarily focus on the project manager and project organization. For their study, they integrate characteristics of the project and team members as well as external factors. And developed a framework which classifies CSFs of a project into four, factors related to the project, factors related to the project manager and the team members, factors related to the organization and factors related to the external environment. Furthermore; their framework tries to formulate a unique and systematic approach to analyze the intra-relationship between in different classes. Their approach involves grouping of success indicators for the project, but it is standardized rather than unique to the industry. Similar to Belassi and Tukel (1996), Steinfort and Walker (2011, pp.11-12) attempt to regroup CSFs, they suggested four CSF groups, factors related to leadership (project mission, top management support, communication), factors related to stakeholder involvement (client consultation, communication, client acceptance), technical expertise factors (personnel, technical task, trouble-shooting), and operational planning and control factors (project schedule/plans, monitoring and feedback, trouble-shooting).

With respect to our subject matter the other study that can strength our augment so far is that of the research conducted by Christopher and Debadyuti (2015), which utilize a similar method of classification in their research about the Critical Success Factors influencing the Performance of Development Projects in Kenya. Their study classifies CSFs into six as project related, client related, consultant related, contractor related, supply chain related and external environment related factors. Their empirical findings also ranks the CSFs based on their order of importance, contractor related factor turns out to be the least important while, the project related factor is the most important one followed by client related factor.

The other approach that we can explore regarding CSFs is that of the proposal made by Khang and Moe (2008) which, suggested a project life-cycle-based framework model for international development projects. The approach try to address critical success factors by considering the stages

and life cycle phases of project as conceptualizing, planning, implementing and closing. Their project life cycle based approach suggested 18 CSFs which has a potential to impact a typical project success.

On the other hand; Cserhati, G., & Szabo, L. (2014) stated project success is often being a major title to be studied in discussing about project management and the CSF study must covers this major five project management concepts namely Leadership, Effective Communication, Team work, Organizational and Project Nature. Tyssen, A., Wald, A., & Spieth, P. (2014) supported the their claim stating that, Effective leadership is crucial in temporary organizations, especially seeing as project members are often less committed than in permanent organizational settings . On the other Ochieng, E., & Price, A. (2010), stated that among project team members communication is very important as if one member gives the wrong instruction, overall of the event can be disturb, thus PMs needs to establish cooperative relationships with the project team members to ensure a good climate for communication, identify participants for the project to ensure commitment and adopt an appropriate leadership style which further explains the importance of team work and also verified by Zulch, B. (2014). Organization related factors for projects success is discussed by the similar study conducted by Weaver, P., & Too, E. (2014), by stating that, projects lacking effective main management support cannot deliver the expected business benefits to an organization. Institutional arrangements and systems are needed to facilitate interfaces between executive management and project teams. Such arrangements will enhance the value created for the organization by ensuring the strategic alignment of its projects, decentralization of decision-making powers, rapid resource allocation and participation of external stakeholders. The fifth project management factor is considered by Yang, L., Huang, C., & Wu, K. (2011) study, they mentioned that, understanding customers and their needs is important to understand our target of customer, who is referring to the audience of event in project, and this requires knowing the project nature which involves the description and objective of the project identifying the theme, knowing the schedule and type of the project as well.

The study conducted by Chan et al. (2004) on Factors Affecting the Success of a Construction Projects, divided the critical factors of project success into five, namely human factors, project factors, project work procedures, project implementation, and factors of the organization's external environment. This five CSFs has been also adopted in a research conducted by White, D.; Fortune, J. (2002) in their study on Current Practice in Project Management. Furthermore; this five CSFs

has been used in another way classifying them as environmental factors affecting the project, human resources factors, procedures, methods, tools, and contextual project matters; by the various studies such as by Hyväri, I. (2006) on Success of Projects in Different Organizational Conditions and Jha, K.N.; Iyer, K.C. (2006) Critical Determinants of Project Coordination. The study conducted by James, H.; Frank, V. (2015) on Cultural Change Management stated that most projects fail before implementation regardless of the type and size of the project or sector they are implemented because most projects fail to guarantee their business activities. Their study can be further understood that, before implementing projects need to define their goal since, projects are implemented to fulfill their business activity. The research by Dwivedi, Y.K.; Wastell, D.; Laumer, S.; Henriksen, H.Z. (2015) stressed that Inefficient communication between people in a project is also a common cause of project failure. But according to Fiedler, S. (2010) study the critical success factors in projects and their failure factors are most often related to the project leader, its management, the whole company, its organization and culture, its technology, or business processes.

Another study conducted in Ghana by Ofori in (2013) used an explanatory method to identify and analyze the quality of project management practices and the critical success factors for projects. And based on his analysis and study he categorized the CSFs into two, factors that hinder project success and factors that promote project success. When he further explained his findings the CSFs that hinder projects success are lack of support/finance, lack of communication, lack of coordination and commitment, lack of experienced and competent personnel, high bureaucracy in government institutions; and lack of consultation with stakeholders. Similarly; he explained the CSFs that promote project success are effective communication, coordination and commitment; top management support; effective planning; having experienced and competent project personnel; teamwork; and good leadership. The other similar research conducted by Dr. Richard & Andrew in 2016 by using and quantitative research methodology and survey methods by collecting data from Ghanaian banking sector, their result indicated that from out of the eighteen CSFs seven of them are associated with negative influence on projects success. They also identified and listed the five most important CSFs based on their importance for project success as improper feasibility studies, inadequately specified tasks, ineffective monitoring and control, improper description of requirements and lack of user participation.

Bethelhem in 2019 has conducted a study related to CSFs in the case of real estate development projects in Addis Ababa, the study mentioned that six CSFs can be considered in the case study and listed them as client objectives, client core competency, project team leader's performance, project management actions, economic environment and physical environment. Furthermore; her study described that, three of the CSFs project management actions, project team leader's performance and client core competency were found to have a strong positive relationship with real estate development project success. The other study conducted by Mamaru, Dr. Ing-Esayas & Sintayehu Assefa's (2016) for Success Factors on Building Construction: the Case of Bole Sub City, Addis Ababa has identified CSFs. Their finding showed that leadership skills of a project manager; project clear objective; adequacy of funding; decision-making effectiveness; project monitoring; project manager's commitment to satisfy quality, cost &time; project manager's early & continued involvement within the project; contractor's cash flow; Site management; coordinating ability and rapport of project manager with contractors/ subcontractors; project manager's authority to form a financial decision, selecting key team members; organizing skills of a project manager are the highest ten major success factors consistent with their significant on a building project in Bole Sub City so as to accomplished projects successfully.

Another study conducted in Ethiopia with the subject of critical success factors is by Stefani in 2017, this particular research was conducted in order to identify and determine the CSFs for the cargo terminal expansion projects of Ethiopian airlines. Their study conclude that, Project objective,' Top management support,' Project scheduling and planning',' Resource',' Monitoring, evaluation and feedback', 'Technical competency and Communication are the major CSFs. The most recent study conducted on subject of CSFs in Ethiopia banking project financing sector is by Surafel Gashaw (2021), his study conducted on the critical success factors of DBE financed projects through project financing modality of the bank where, project financing is based on equity share by the client and the bank. In his study he considers projects that the bank involves only in providing finance and controlling the progress of projects depending of their disbursement schedule, while the clients are in charge of acquiring the necessary resources for the projects including handing over procurement and contract related issues with contractors. Even if the SME lease financing modality of DBE is different in a various key and critical issues, his findings on the subject can be taken as a datum for this particular research study, based on his findings he has identified eight critical success factors for full project financed projects namely as, project related

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factors, project management factors, organization-related factors, procurement and contract related factors, project owner/client-related factors, project manager related factors, contractor/ supplier related factors, and external and work environment factors."

2.3.   Research Gap

After going through the previous studies the researcher understands that there is no coherent CSF structure, instead, the studies indicate distinct views on what constitute CSFs depending on project type, how the researchers describe and define them. As stated by Yang, Shen& Ho (2009), "the unique nature of projects dictates that critical success factors identified in one project cannot be directly transferred to other project". Similarly; as (Belassi, W., Tukel, O.I., (1996) also stated that, CSFs usually discussed as a general factors or specific to particular projects which makes them non comprehensive lists, and this approach makes it difficult not only for project managers but also for researchers to evaluate projects based on these factors.

Thus; based on the findings from the CSF reviews made on similar researches, it's the researcher's conclusion to classify and identify the CSFs into eight classes, considers them as a research gap and made further analysis based on them, the researcher also believes that, the classes of CSFs can sufficiently evaluate different types of projects, recalling development bank of Ethiopia is also engaged in financing different types of projects in its lease financing modality. The identified critical success factors are the following:

1. **CSFs related to the project characteristics**: which includes size, location and uniqueness of the project. The size, value, and uniqueness of a project's activities can be difficulty to a project manager who is used to planning and coordinating common and simple activities (Belassi & Tukel, 1996, p144).

2. **CSFs related to procurement and contract:** (Imran Mehmood, 2017) mentioned that, "leading to problems in providing necessary equipment and equipment delivered with incorrect specifications, the project's acquisition method is critical to project success". Thus; this class includes factors such as effective procurement methods and effective contract formulation and contract administration. Since, this research focuses on the financing through capital goods leasing, this CSF will cover the procurement and contract related issues with regard to the equipment suppliers.

3. **CSFs Related to the Project Management:** AL-Hajj & M. Zraunig (2018) stated that, project management techniques, along with a number of other factors, have an impact on project success. Based on their literature this specific class includes factors such as effective communication among all project participants, adequate project control and change management, project performance monitoring and feedback, effective quality assurance program, adequate use of project management tools and methodology, decision making effectiveness and risk identification and allocation.

4. **CSFs related to organization:** These set of factors are, the once which influence the project's organizational support, according to Belassi and Tukel (1996). Tukel and Rom (1995) agreed in this context that top management support is one of the most important factors for project success, regardless of industry. Thus; this class of CSFs include top management support and commitment, organizational /corporate culture, adequate project funding/ budget to completion, appropriate organizational structure and training. This particular CSF will concern the organization or DBE related factors since, the research is intended to explore the banks lease financing modality.

5. **CSFs Related to clients/lessee**: Pinto and Slevin (1987) mentioned that, factors concerned with client characteristics, client type and experience which include adequate experience on similar projects, ability to make timely decision, and client's risk attitude (willingness to take risk). The lease financing modality of DBE allows the bank to have ownership of the capital goods until the lease is fully paid, thus this particular critical success factor will explore issues related to the leasee or the bank client.

6. **CSFs related to project manager**: according to Pinto and Slevin (1989), appointing project managers with appropriate administrative and technical skills is an important factor for successful project completion. Thus the researcher includes factors for this class such as PM's competence and experience, PM's authority to take decisions, PM's managerial, coordinating and leadership skills, and Adaptability to changes, management of risk.

7. **CSFs Related to Supplier:** according to Potti Srinivasa Rao, Shiva Prasad HC, and Gopalkrishna B (2014), clients/suppliers have a significant impact on project success, which, the researcher includes supplier's competence and commitment, contractor experience, after sales management, use of advance technology & equipment's and economic and financial situation into this class of CSFs. This particular CSF discusses

issues that are related to capital good suppliers (machine manufactures and authorized retailers) since, the financing modality is funds clients in kind.

8. **CSFs related to business & work environment:** According to Morris and Hough (1987), this CSF have an impact on projects at all stages of their life cycle. As an example, they stated that natural disasters and Political conflicts could have an impact on a project at any stage of its life cycle. Hence; the researcher includes the following factors into this class, which are economic related factors (e.g. exchange rate, inflation, price escalation etc.), political related factors (e.g. political interference, political conflicts, vandalism etc.), technical and technological environment, physical environmental factors, site related factors (access road, utility and other ground conditions), and X-Factor (fraudulent practices, corruption, favoritism, Lack of ethics, etc.)

Chapter Three
3. Research methodology

3.1.　　Introduction

The research methodology section of will include research design, the targets population and sampling technique, sampling design, sources of data, data collection instrument, procedures of data collection, methods of data processing and data analysis, reliability analysis and ethical considerations that is used by the researcher.

3.2.　　Research Design

The study will use both descriptive and explanatory research designs, as well as a quantitative approach. According to Burns & Grove (2011) "research design is a blue print developed to tackle a research problem. It is the 'architecture' or structure that is used by the researcher to answer the research questions and achieve research objectives.

Descriptive research design allows our research to describe the situation of our case research study, its theory-based can be created by gathering, analyzing, and presenting collected data. Furthermore; this design method will create a chance for the research to provide insights why the study is needed in the first place. Thus; descriptive design will help us to better understand the need for the research and to identify the CSFs that impact the success of the lease financed projects by DBE which, is discussed on literature review section. Similarly; the explanatory design allows the research to explain unexplored aspects of our research questions, the design will help us to figure out the relationship between the different CSFs and their influence on lease financed SME projects by DBE. The qualitative approach of the research is intended to show our findings from our descriptive design choice since; numbers can provide us a better perspective for critical decisions and the research objective is to identify & figure out the relationships of CSFs that influence the SME projects success.

3.2.1. Research Approach

The approach the study prefers to use is a qualitative approach, with the intention to show our findings from our descriptive design choice in a quantifiable manner since; numbers can provide us a better perspective for critical decisions and the research objective is to identify & figure out the relationships of CSFs that influence the SME projects success.

Figure 3: Research flow process Diagram

3.2.2. Population

The target population in a typical research design is the total group of individuals from which the sample will be drawn and in order to design the research sample, the first critical step will be to define the collection of objects which is called universe or population. For this particular research the target population includes all the employees of DBE except Mekelle district consisting district, branch and head office staffs working on five departments mentioned in the scope since; the financing process directly involves them. The target population of the research (the professional staff) will be 260. (Source: DBE HR directorate)

3.2.3. Sampling

The research will select and identify samples from the target population, specifically from district level KYC teams, district level SME projects appraisal and approval teams, head office level

procurement and follow up teams consisting of managers, team leaders, officers and engineers who directly overseas the capital goods leasing process. Different types of SME projects are allowed for leasing based on the bank leasing policy and procedure, however; all SME projects fall into the government priority areas including Agriculture, Agro Processing, Manufacturing, Construction, Mining and tourism sectors.

3.2.4. Sample Size

The sample size determination is conducted in order to select the total number of representatives from our target population. The research will consider homogeneity and the determinant factors such as time and cost, the research choses to utilize Solvin's formula (1960), to use this equation for our sample size we should to take into account confidence levels and margins of error. The margin of error or level of precision is selected based on our population size and a confidence level of 95% because a normal distribution approximately 95% within the sample values are two standard deviations of the true population value (G.D Israel 1992). The research selects 7% precision level to reduce time and cost.

$$n = \frac{N}{1 + N\,(e)^2}$$
$$n = \frac{260}{1 + 260(0.07)2}$$

Where; N=total population=260
e = precision level = 0.07
n = sample size 114.3 =115

3.2.5. Sampling Technique

The sampling method that will be used for this particular research is a stratified random sampling. This typical approach can give us a better accuracy in our preparation of sample design because the method allow us to estimate samples without a significant cost increase. The stratified random sampling divides our total population into a more manageable and homogeneous individual groups/sub-populations which are called "strata". The research will have five major stratums, and out of the five major stratums each of the two will consist 11 sub-populations as listed in table 3.1. Since, these sub-populations are more homogeneous than the total population, it would be possible to obtain more accurate estimates of each stratum and to estimate each of the component parts more accurately; a better random estimate of the whole would be obtained from each stratum.

From the sample sizing we have determined that, the total number of our sample size is 105. But the number of population at each of our subpopulation is not equal. Thus; we will calculate the sample size for each groups as follows.

$$n1 = \frac{nN1}{N}$$

Where n= total number of samples (115)
N= total number of population (260)
N1= total number of population in each stratum
n1= number of samples in each stratum

Table 3: Research sample sizing and total population

S/N	Departments	Population (N1)	Sample (n1)
1	**Total District & Branch Customer Service Teams**	**110**	**49**
	AA District	*15*	*7*
	Adama District	*15*	*7*
	Dire Dawa District	*10*	*5*
	Jimma District	*10*	*5*
	Wolayita District	*8*	*3*
	Nekemete	*6*	*2*
	Gonder District	*10*	*4*
	Dessie District	*12*	*6*
	Bahir Dar	*10*	*5*
	Hawassa	*8*	*3*
	Gambella District	*6*	*2*
2	**Total District & Branch Appraisal & Approval Teams**	**60**	**27**
	AA District	*9*	*4*
	Adama District	*8*	*3*
	Dire Dawa District	*5*	*2*
	Jimma District	*5*	*2*
	Wolayita District	*4*	*2*
	Nekemete	*4*	*2*
	Gonder District	*5*	*2*
	Dessie District	*6*	*3*
	Bahir Dar	*5*	*3*
	Hawassa	*5*	*3*
	Gambella District	*4*	*1*
3	**CGPSD (Heard Office)**	**30**	**13**
4	**Lease Follow up Directorate (Head Office)**	**25**	**11**
5	**International Banking Department (Head Office)**	**35**	**15**
	Total	**260**	**115**

3.3. Types and Sources of Data

To address the research questions optimally and to meet the research objectives effectively the essential data for this study will be collate from primary and secondary sources.

3.3.1. Primary Data Sources

For this study, primary data is collected through questionnaires and interviews from employees. The data is also collected through structured questionnaires which comprise both open-ended and close-ended. The researcher conduct data by telephone interview, email, Telegram, and addressing in person with sample respondents to fill out the questioner. The questioner is prepared in English version. Hence, all alternative availed to employees to choose the best to fill out the questionnaire. Finally, the primary data that is obtained through questionnaires and interviews are analyze to explore and discover the critical success factors of SME projects financed through capital goods leasing.

3.3.2. Secondary Data Sources

The secondary data for this study obtained from archival records and document reviews such as legislations, manuals, financial reports, journals, articles, and other sources, to get reliable data from the right source of information. Secondary documents are collected to have knowledge about CSFs in theory and with practical examples and best practices.

3.4. Method of Data Collection

Data collection is gathering data and information to addressed questions of the investigation, which calls for an appropriate and convenient data collection technique to substantiate the investigation and to collect the relevant information Zikmund (2003). The researcher used standardized questionnaires with a five point Likert scale for the study. Similarly; to conduct the collection of relevant and valid data for this study, the researcher uses questionnaires and interview for primary data and documentation and archival records for secondary data, by assessing various policy reports of the bank, other similar practices, and academic literature such as reviews of related literature on critical success factors.

And to develop an appropriate questioner for this study, the researcher based previous researches and publications which are relevant to this particular study such as Christopher Ngacho, Debadyuti Das (2014), Aniel Kazhibekova & Vildana Jusufovic(2010); as well as previous theories and researches that are conducted to address similar subjects on CSF that are already taken into account by this particular project.

3.5. Method of Data Analysis

To conduct the analysis part of the study, the research will use, quantitative methods with inferential statistical technique and descriptive analysis. The descriptive analysis includes frequency, frequency distribution, valid and cumulative percentage which will be used to indicate the overall information of respondents. While, the inferential statistics will be conducted with a computer software, statistical package for social science (SPPS).

The research will also conduct the descriptive analysis so the data collected can be broadly described tested and analyzed. The other analysis that the research will include is a factor analysis which is exploratory factor analysis (EFA) so as, to determine groups among the inter-correlations of a set of variables in order to reduce or summarize the data using a smaller set of factors or components.

3.5.1. Descriptive analysis

Descriptive analysis for the collected respondents is conducted by using SPSS (statistical package for the social science) software, the collected data and from the respondents through the developed questioner is codded and introduced to SPSS software. The coded information and data further went through statistical analysis by the software to obtain and percentage mean, variable frequency and standard deviation. Based on the acquired data additional analysis was performed such as factor analysis, statistical tests, and descriptive analysis.

3.5.2. Factor Analysis

As it has been stated in the previous sections, and (Pallant, 2007) mentioned the factor analysis will be conducted with the intension to determine groups among the inter-correlations of a set of variables in order to reduce or summarize the data using a smaller set of factors or components. Similarly; Timothy (2011) also stated that, exploratory factor analysis (EFA) points out factors which are strongly correlated each other., and further groups them into a specific factor and moves for the next highly correlated batch of items, where they will be assigned to another group factor. Thus; it is possible to assign a collective designation or name to represent this grouped factors.

According to (Pallant 2007), Statistical Package for Social Science (SPSS) is capable of identifying how many possible factors are there and how many items/factors fall into the same group. Also, by using the SPSS the eigenvalue in scree plot can determines the principal components, which are rotated orthogonally varimax, to obtain more evenly distributed factor

loadings within the components. Furthermore; pallant also explains the following three steps can be used to perform a factor analysis.

- ✓ **First step:** - the first step is assessment of suitability of the data for factor analysis; to decide the suitability of a typical data for factor analysis two main issues can be taken into consideration. The Bartlett's test of sphericity and Kaiser- Meyer-Olkin Measure of Sampling Adequacy (KMO index), where the data should be statistically significant at p 0.05 and the data should also be greater than 0.6 for both tests respectively in order to have a valid and good factor analysis.

- ✓ **Second step:** - extraction of factor; this step or process involves identifying the smallest number of factors that can be used to best represent the interrelation among the set of variables. This particular study will also show and use Principal component analysis approach by using SPSS software. The other technique that, will be used by this particular research is screen test where the researcher will be able to plot the eigenvalues of each factors and by inspecting the plots it is possible to find a point at which the shape of the curve changes direction and where it becomes horizontal.

- ✓ **Third step:** - the final step is factor rotation & interpretation. According to (Timothy, 2011), the rotated factor matrix shows how the factors are related to each factor. Here; the extracted factors in the second step, will be rotated based on the factor loading they have so, we can be able to interpret and report them easily. This typical study uses Varimax method for factor rotation & interpretation because the method is the most used and common for orthogonal rotational approach.

3.5.3. Spearman Rank Correlation Factor

Accuracy and precision of a typical information or data can be checked by Spearman's rank correlation factor. Intra-relationship strengths between different items concerning different attributes, where in this particular study this attributes are the CSF. In this approach the correlation factor is represented by values between +1 and -1, where +1 represents agreement between factors or a perfectly positive relationship while, -1 represents a relationship which is perfectly negative or a disagreement. Thus; sample estimates of correlation which are close to unity in value/weight indicate a strong correlation while, values that are close to zero represent a very week or no correlation at all. The study also used SPSS to conduct spearman rank correlation factor.

3.6. Reliability test

The reliability of a data is performed in order to check the stability and consistency of a particular information. The research uses Cronbach alpha method to check the reliability of the collected information by using SPSS. The data is collected through the questioner that the researcher developed which represent the research question. According to (Taber, 2018), it is essential to test a collected data reliability for its Alpha value by using Statistical Package for Social Sciences (SPSS 26.0) software, where an Alpha value less than 0.6 suggest the questioner used by the researcher and also the prior studies used by the researcher to develop the questioner is not considered reliable, implying reliability Alpha must be at least greater than 0.6 and more preferably more than 0.7 to ensure the appropriateness of the collected data to answer the research question.

Cronbach's Alpha was calculated for all 39 items as a whole which are distributed along eight factors and also for the eight factors namely project nature related factors, project management factors, organization related factors, procurement and contract related factors, lessee/client related factors, project manager related factors, supplier related factors and external and work environment factors.

For this research (Taber, 2018) criteria is used to evaluate the reliability of our data or its alpha (α) coefficient.

Table 4: Reliability of the total data

Reliability Statistics	
Cronbach's Alpha	N of Items
.881	39

Table 5: reliability of each CSF

No	Independent variables (CSFs)	Number of Items	Number of deleted item	Cronbach's Alpha
1	Project nature related factors	3	0	0.742
2	Project management related factors	7	0	0.829
3	Procurement and contract related factors	2	0	0.859
4	Organization related factors	5	0	0.818
5	Lessee/client related factors	3	0	0.800

No	Independent variables (CSFs)	Number of Items	Number of deleted item	Cronbach's Alpha
6	Project manager related factor	4	0	0.764
7	Supplier related factor	6	0	0.865
8	Business and work environment related factor	9	0	0.877

As we can see from the reliability test on each factors, we found out that they fall into a highly reliable data or information category, thus; there is no need to delate an item (Independent variable) to further improve the reliability

3.7.   Validity

Validity of the data or information is assured by making the sampling technique free from bias where, each subject have equal chance to score. Because validity is giving emphasis on the extent to which a measurement actually measures those feature the researcher/the study wishes to measure and provided information that is relevant to the question being asked. The researcher believed the questioner developed for this particular study is comprehensive to consider all the variables/factors that are being measured.

3.8.   Method of Data Presentation

From the data presentation, data interpretation, and data analysis part of this study quantitative dimension will come first and descriptive analysis will follow. To analyze the collect, raw data from the different sources the researcher will use descriptive statistical analysis. The research will also collect raw data from the different sources then it will be organized and present using different tools such as frequencies, percentages, graphs, charts, systematic drawings, and tables. Finally, the interpretation will be made based on the findings of descriptive statistic results.

3.9.   Ethical Consideration

During the lifecycle of this study, the researcher will take careful and serious ethical considerations in order to keep the quality as well as the truthfulness of the information. For instance, during data collections, the researcher requested the willingness of respondents in respect, harmonious, and

friendly way. Additionally, respondents will inform in advance of interviewing and distribution of questionnaires. During the document analysis, the researcher strongly acknowledged the work of other researchers by using a standardized format of citation, such as footnotes, endnotes, and bibliography citation when the researcher used other researchers to work as a particular reference. Finally, in the analysis section of this study, the response of respondents analyzed anonymously in order to keep the information in a strictly confidential manner.

Chapter Four

4. Data Analysis, Presentation and Discussion

4.1.   Introduction

The result and discussion part of this study deals with presentations, analysis and interpretation of the data or information that is collected through the developed questioner from the target population or respondents. The collected data was transfer to SPSS 26.0 version to conduct the required analysis.

4.2.   Rate of response

The questioner consisting of 39 items distributed through 8 variables is used to collect the primary data/information. A total number of 115 questionnaires were prepared and all of them were delivered to respondents, however; from 115 participants 97 or 84.3% were be able to give reply which is sufficient enough to conduct the analysis. From the total number of 97 respondents 5 were rejected due to incomplete response. Thus; the total number valid of responses gathered is 92 or 80%.

4.3.   Respondent's information

General information of respondents were obtained by conducting a frequency analysis on the received and valid responses. This information includes the gender, age, education level, job location, department, position and work experience of the respondents.

Table 6: respondent's information

No	Item	Description	Frequency	Percentage
1	Gender of the respondent's	Male	58	63
		Female	34	37
2	Age of respondent	<30 Years	11	12
		30-50 Years	71	77.2
		>50 Years	10	10.8
3	Education Level of respondents	PHD	0	0
		Masters	24	26.1
		1st Degree	68	73.9
4	Job location of respondents	Head office	37	40.2
		District office	38	41.3
		Branch Office	17	18.5

No	Item	Description	Frequency	Percentage
5	Department of respondents	CGPSD	13	14.1
		LFFD	11	12.0
		IBD	13	14.1
		KYC	16	17.4
		PAAT	39	42.4
6	Job position of Respondents	Director	2	2.2
		Team manager	6	6.5
		District/branch manager	2	2.2
		Engineer	22	23.9
		Loan officer	60	65.2
7	Work Experience of respondents at DBE	Below 3 years	4	4.3
		3-6 years	30	32.6
		Above 6 years	58	63.0

The frequency analyses conducted by SPSS gives us the summary of the respondents as well as their characteristics. From the gender frequency we have found out that 63%/58 of respondents are male and the remaining 37%/34 female which indicate the distribution of the gender across the bank fevers male employees. The age distribution of the respondents shows age group below 30 are 12%/11, age group between 30 and 50 are 77.2%/71 and respondents whose age is above 50 takes about 10.8%/10, indicating the bank is staffed with employees on their productive age. Taking the educational background of the respondents, we found out that 26.1%/24 have a master's degree and 73.1%/68 holding a first degree which we can conclude the respondents are fairly educated. Similarly; the distribution of the respondents work experience indicate that 4.4%/4 have less than three years of experience, 32.6%/30 have three up to six of experience and the remaining 63%/58 have more than six years of experience working for the bank. Since; this research subject of study or the lease financing modality is operational for the past six years, we can conclude that the respondents are experienced enough to participate on the study.

Regarding the job location or post of the valid respondents we found out that 40.2%/37 of respondents located at the head office, 41.3%/38 located at district office and 18.5%/17 located at branch offices. Looking at the department or the job sector of the respondents across the bank, we found out that 14.1%/13 found on CGPSD, 12%/11 found on LFFD, and 14.1%/13 found on IBD departments/directorates which are located at the head office of the bank, similarly; 17.4%/16 found on KYC teams and 42.4%/39 found on PAAT teams which are located on branch and district

offices. Comparing our findings of the frequency of the respondents we can fairly conclude that the ratio of the respondent's job location, their respective department and job location concedes with the researches sample population design.

The frequency analysis conducted on the job position of the respondents shows, 2.2%/2 are directors, 6.5%/6 are team managers, 2.2%/2 are district or branch managers which are in a managerial position and 23.9%/22 are Engineers and 65.2%/60 0f the respondents are loan officers. The quality of the respondents can be generally described by the work experience of our respondents. According to (Saunders, etal., 2007), respondent experience is a good predictor of sample precision, and our case 95.6% of the respondents have more than three years working for the bank and all of them are currently employed for development bank of Ethiopia.

4.5. Factor Analysis
4.5.1. Sampling Adequacy and significance of variables for factor analysis
Testing factorability of all 39 variables by using Bartlett's test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy is our first step in order to perform factor analysis. From the SPSS output, the correlations along the diagonal of the anti-image correlation matrix (Table 3.5) confirmed all the 39 variables has a KMO value greater than 0.5, with the lowest value (0.508) register by variables PRN1 (The location as well as the site condition of the projects does not have effect) and PACR2 (The bank has effective procurement method) and with the highest value (0.875) registered by variable SR4 (The suppliers have sufficient financial capabilities to deliver the capital goods fully on time) indicating our data sheet is well suited for factor analysis. A variable which has a KMO value less than 0.5 at a correlations along the diagonal of the anti-image correlation matrix indicate the data sheet is not suitable to perform a factor analysis (Hair etal., 2006). Furthermore the KMO measure of the sampling adequacy turns out to be 0.693.

Table 7: Sampling Adequacy and significance

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.693
Bartlett's Test of Sphericity	Approx. Chi-Square	1896.160
	df	741
	Sig.	.000

Table 8: Anti-image correlation matrix

	PNR1	PNR2	PRN3	PMRF1	PMRF2	PMRF3	PMRF4	PMRF5	PMRF6	PMRF7	PACR1	PACR2	OR1	OR2	OR3	OR4	OR5	CR1	CR2
PNR1	.508[a]																		
PNR2		.589[a]																	
PNR3			.656[a]																
PMRF1				.536[a]															
PMRF2					.698[a]														
PMRF3						.738[a]													
PMRF4							.613[a]												
PMRF5								.709[a]											
PMRF6									.645[a]										
PMRF7										.752[a]									
PACR1											.522[a]								
PACR2												.508[a]							
OR1													.598[a]						
OR2														.698[a]					
OR3															.713[a]				
OR4																.705[a]			
OR5																	.747[a]		
CR1																		.521[a]	
CR2																			.545[a]

	CR3	PMR1	PMR2	PMR3	PMR4	SR1	SR2	SR3	SR4	SR5	SR6	BAWER1	BAWER2	BAWER3	BAWER4	BAWER5	BAWER6	BAWER7	BAWER8	BAWER9
CR3	.707[a]																			
PMR1		.641[a]																		
PMR2			.555[a]																	
PMR3				.679[a]																
PMR4					.674[a]															
SR1						.775[a]														
SR2							.780[a]													
SR3								.721[a]												
SR4									.875[a]											
SR5										.817[a]										
SR6											.819[a]									
BAWER1												.641[a]								
BAWER2													.792[a]							
BAWER3														.791[a]						
BAWER4															.823[a]					
BAWER5																.752[a]				
BAWER6																	.621[a]			
BAWER7																		.702[a]		
BAWER8																			.615[a]	
BAWER9																				.835[a]

4.5.2. Factor (component) extraction

As shown in the following graph (Figure 4.1), what is indicated by the arrow on the above scree-plot represents all factors prior to the breaking point. Which is the point at which the graph begins to flatten. And this particular point was discovered to be 8, implying that eight (8) principal components are valid to be considered for this specific study.

Figure 4: Scree plot

4.5.3. Factor Analysis following Varimax Rotation

Since, our primary purpose was to identify the underlying factors, principal components analysis (PCA) was used with varimax rotation. Initially, all of our 39 variables were free to load on various factors as long as their eigenvalue was greater than one. Next by using the already generated scree plot we ere be able to determine eight factors to be extracted. Due to this step of identifying the final factors underlying the CSFs was subjected to five conditions.

- The number of factors fixed at eight
- Deletion of items if their loadings is less than 0.5
- Checking communalities of variables are at least 0.5

- Retention of only those factors with at least two items
- The number of factors extracted should together account for at least 60% of the variance as (Hair et al. 2006 and Tabachnick, B. & Fidell, L., 2007).

The following table: 4.6 shows rotated component loadings and eight components which have been extracted the loadings explaining the relationship (similar to a correlation) between the original variables and the extracted factor. This Rotated Component Matrix of Principal Component Analysis (PCA) displays the variable factor loadings. And when we move across each row in the following table, we can confirm that, the factors that each variable loaded on sufficiently or highly.

Table 9: Rotated component matrix

	Component							
	1	2	3	4	5	6	7	8
The location of the projects.							.792	
The uniqueness of the projects.							.757	
Complexity of the projects.							.726	
Adequate Project control and change management.			.666					
Project stakeholder's effective communication.			.781					
Adequate project management tools and methodology.			.687					
Regular project performance monitoring and feedback collection.			.698					
Effective quality assurance system.			.778					
Effective Decision making.			.514					
Effective man agent of project risks.			.679					
Effective contract administration and formulation								.895
Effective procurement method								.865
Strong organizational culture in the project implementation				.708				
Appropriate organizational structure.				.671				
Top management commitment.				.669				
Adequate allowable amount of budget/funding.				.771				
Sufficient training.				.783				
Client previous experience.					.763			
Clients willingness to take risks					.813			
Appropriate and timely decision of clients.					.791			
PMs technical experience and competency.						.527		
PMs important decisions.						.607		
Ability of PM to changes and skill of managing risk.						.683		

	Component							
	1	2	3	4	5	6	7	8
PMs adequate leadership, management and coordination skills.						.768		
Supplier's commitment to contract obligation and competence.		.816						
Effective after sales service delivery by suppliers.		.595						
Delivery Of advanced technology and brand new equipment.		.753						
Supplier's sufficient financial capabilities.		.646						
Involvement of local/third party aftersales provides.		.767						
Supplier's specialization and experience.		.675						
Political related issues such as riots and interferences.	.709							
Technical and technological related familiarities.	.768							
Location related factors like road access and difficult geography.	.583							
Public utility related factors such as availability of electric power and water.	.815							
Environmental friendliness pre-conditions.	.771							
X-factors such as fraud practices and corruption.	.557							
Harsh weather conditions or irregular seasonal.	.514							
The socio-cultural issues such as language, culture and customs.	.692							
Economic related factors such as exchange rate inflation and price changes and escalation.	.780							
Eigenvalue	4.862	4.002	3.863	3.165	2.759	2.219	2.170	1.974
Percentage of variance explained%	12.466	10.262	9.905	8.116	7.074	5.689	5.563	5.061
Cumulative percentage%	12.466	22.727	32.632	40.749	47.823	53.512	59.075	64.136
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.								
a. Rotation converged in 7 iterations.								

The second specific objective of this study is intended to rank the CSFs based on their degree of importance to the success of lease financed projects by DBE, and from the SPSS output of factor analysis specifically the rotated component matrix identified that "Business & work environment related factors" are the most important construct of lease financed project success which has the highest eigenvalue of 4.862 and taking about 12.466% of the variance in our data set. The second highest eigenvalue 4.002 and accounting 10.262% of total variance in the collected data is

registered by "supplier related factors", thus; this typical factor is the second most important factor for the success of lease financed projects in DBE. The next most important CSF is "Project management related factors" registering the third highest eigenvalue of 3.863 and having 9.905%`of the total variance, while the fourth important CSF founded to be "organization related factors" with the fourth highest eigenvalue of 3.165 and accounting 8.116% of the total variance from our data set.

From the conducted factor analysis the remaining four critical success factors according to their order of importance are found to be "lessee/client related factors", "Project Manager related factors", "project nature related factors" and "contract and procurement related factors" having an eigenvalue 2.759, 2.219, 2.170, and 1.974 and accounting 7.074%, 5.689%, 5.563% and 5.061% of the total variance from our data set respectively. These eight critical success factors that are extracted represent different dimensions of success factors which affecting the success of DBE lease financed projects. Thus; based on the analysis the research has made the success factors according to the degree of importance are presented in the following table.

Table 10: Rank of CSFs

Rank	Critical success factor
1	Business and work Environment success factors
2	Supplier related factor
3	Project management related success factor
4	Organization related success factor
5	Lessee/client related success factor
6	Project manager related success factor
7	Project Nature related success factor
8	Procurement and contract related success factor

4.6. Interpretation of PCA extraction method

As we have discussed in the earlier sections, our computation made to determine CSFs through Principal Component Analysis Extraction Method is validated through appropriate tests which, enabled us to develop and validate a measurement scale to enable measurement of success amongst DBE lease financed projects. Thus; we can say the study was be able to demonstrate the success factors which affect the success of development bank of Ethiopia lease financed projects can be

explained through" project nature related factors", "project management related factors", "procurement and contract related factors", "organization related factors", "lessee/client related factors", "project manager related factors", "supplier related factors", and "external and work environment related factors". Furthermore; our findings provides us an evidence that, the success scale is appropriate for determination of success of DBE lease financed projects. The following section discuss the brief description of the CSFs extracted.

Interpreting the output from SPSS factor analysis will discuss on one of the major objectives of this study which, concerned to explore the relationship of the individual CSFs with success of lease financed projects by DBE.

4.6.1. Business and work environment factors:

Recalling table: 4.7 "External and work environment factors" are found to be the most important factors amongst the other eight CSFs for DBE lease financed projects. The highest loading for this particular factor/component is registered by "Public utility related factors such as the availability of electric power and water" with loading of .815. This verifies that, the DBE lease financed projects are highly affected by utility related factors such as electric power and water. The utility related factors are followed by economic related factors such as exchange rate inflation and price changes and escalation, Environmental friendliness pre-conditions, Technical and technological related familiarities, Political related issues such as riots and interferences, The socio-cultural issues such as language, culture and customs, Location related factors like road access and difficult geography, X-factors such as fraud practices and corruption and Harsh weather conditions or irregular seasonal changes with loadings of 0.780, 0.771, 0.768, 0,709, 0.692, 0.583, 0.557 and 0.514 respectively. The collective influence of ecological, political, economic, socio-cultural, and technological contexts in which the lease projects are carried out is referred to as the external and work environment.

In case of DBE lease financed projects, business and work environment related success factors are external to the projects. Belassi and Tukel (1996) listed a few of environmental factors that can affect the project's performance. But in detail, Pinto and Slevin (1989) introduced these similar factors in their previous empirical study, which include political, social, economic, factors related to the advances in technology, and factors related to nature, and confirmed that most of them affect project during planning stage. However; according to Morris and Hough (1987) believe that these

environmental factors affect projects at all stages of their life cycle. And, their conclusion on the influence concedes with the findings of this study which suggests this typical factor is the most important for the success of DBE lease financed projects.

Since, DBE lease financing procedure engaged in each stage of projects life cycle, political issues such as riots affect projects success by crippling raw material supplies for projects, forcing projects to cease operation due to fear of becoming a collateral damage and other political interferences such as claims of ownership form locals where projects are established severely affect their success. Since, this financing modality is targeted for SMEs with a limited financial capability and also the program has a limit on the amount of budget allowed for projects, external environment factors as economic factors which include exchange rate inflation and price changes, have a significant effect on the price of capital goods which directly affect the ability of the projects to acquire their desired items. Plus, price changes on raw materials such as plastic raw materials that are acquired from foreign markets limits their capability to operate in full capacity and to be competitive in the market.

Regarding projects that are affected by geographical, location and natural factors such as road access, harsh weather conditions, irregular seasons and environmental friendliness pre-conditions affect agriculture and mining lease financed projects. Since, road access is limited in the country most mining projects such as coal mining, stone quarrying and marble mining projects are facing difficulty to reach the end user affecting their success. Also success of agriculture projects are directly influenced by natural phenomena's due to the fact that mechanization of farms is not widely spread in the country.

Similarly; the other external work environment factor is availability of utility such as power availability and reliability, which directly affect the performance of this projects by limiting their capacity due to frequent power interruption, also the lack of enough electric power to all industries across the country, forces this projects to concentrate in urban areas making the projects closer market crowded. Overall; this factor is too critical for the success of this lease projects and DBE must take into account the issues during financing.

4.6.2. Supplier related factor

"Supplier related factors" score the second highest eigenvalue and ranked the second most important success factor amongst the eight. From the context of this particular study suppliers are defined by the parties responsible for delivering the capital goods which are selected by the clients and approved by DBE for procurement. For this typical CSF the highest factor loading is observed in "Capital goods suppliers' commitment to contract obligation and having the required competence" with a value of (0.816). Based on their loadings components "The involvement of local/third party aftersales provides", "delivery of recent technology", "suppliers specialization and experience", "supplier's sufficient financial capabilities to deliver" and "delivery of aftersales service" score 0.767, 0.753, 0.675, 0.646, and 0.595 respectively.

According to Potti Srinivasa Rao, Shiva Prasad HC, and Gopalkrishna B (2014); contractors or supplies have a significant impact on the success of projects. Based on their study one of the major variable considered under this factor is suppliers commitment to contract obligation and their competence for the task, as the results from this research also confirms. Since, the lease financing modality is all about in-kind funding, it is important for DBE to assure the selected capital goods supplier's commitment and competence in delivering the items based on contract obligations. Failing to approve suppliers for this critical variables before engaging with them into procurement obligations may result to deliver goods with unqualified specifications, late delivery of items as well as failing to receive after sales needs of the projects which in turn cripples projects before they even become operational. The other variable considered in this typical success factor is suppliers financial capabilities to deliver the capital goods fully on time, this variable has the similar impact as their competence because incapable contractors have a potential to deviate from their contact which can trigger a chain of issues that can affect lease projects success.

Similarly; the contractors/suppliers effective provision of aftersales services is critical for the success of lease projects. DBEs lease financing modality targets SMEs which are new to project environments with limited experience in establishing projects, thus; the selected supplier's capacity to deliver trainings on machine operations, maintenance operations, performing installation and also availing spare parts which are part of aftersales operation is crucial for their success. Furthermore; capital goods suppliers' specialization and experience on the products they engaged to deliver is the other most important factor. Selecting specialized suppliers enhances

product reliability and to deliver goods according to desired specifications, in addition to the reliability advantage their experience and proved reputation will make them the better option to acquire the advanced technology which are may provide a better efficiency. Thus; DBEs lease projects will be more advantageous in selecting suppliers with this criteria, however; the nature of this lease projects also demand the selected capital goods to suit the clients technical capabilities to run the technology and perform maintenance since most of them are new to the business, therefore, it is not always true to ensure success by acquiring a highly advanced technology. Since, lease financing modality leasing time spans five to ten years, it is important to the bank and to the lessee acquiring brand new equipment's which can help the projects to run with a reduced breakdowns and better productivity during the lease period and beyond.

The study also reveals that, the availability of third party or local after sales providers to have a positive influence to lease projects success. The foreign capital goods supplier with a local agent or a product with local third party service providers in a desired bonus for projects success because, clients can source services, spare parts or required trainings in a closer proximity with a relatively lesser coast, thus; it is also critical for DBE to prefer contractors with this access during their selection and evaluation of potential suppliers.

Overall, for the success of DBE lease financed projects it is critical that the bank should give a great emphasis on the selection of capital goods supplies on their contract commitments, keeping obligations, their ability to deliver new technologies, sufficient aftersales delivery, the availability of local agents and service givers as well as the suppliers specialization on the product they deliver and their reputation in the local market.

4.6.3. Project management related factors

The third most important CSF for the success of DBE lease financed projects based our study finding is "Project management related factor", recalling table: 4.7 again, "stake holders effective communication amongst themselves" had the highest loading of 0.781 while the "effective quality assurance system", "regular project performance monitoring and feedback collection", "adequate project management tools and methodology", "project risk management", "Project control and change management" and "decision making" register 0.778, 0.698, 0.687, 0.679, 0.666 and 0.568 respectively.

Project Management Technique refers to the effective and efficient application of knowledge, skills, tools and techniques in projects. From our finding, DBE lease financed projects success is highly affected by poor project management Tanique similar to the study conducted by Dr. Richard Amponsah & Andrew Hansen-Addy (2014) which found same result that adequate use of project management tools and methodology is a success for Banking Sector Projects in Ghana.

According to Gardiner (2005, p.5) suggests a more (success) based definition for project management, which capable of showing the relationship of this particular factor and the success of lease financed projects by DBE, based on him project management is the planning, monitoring, and control of all aspects of a project, as well as the motivation of all those involved in it, to achieve the project objectives on time and within specified cost, quality, and time constraints. Since, this typical financing modality involves a limited funding for a specially targeted clients, proper project management such as essential for their success since, taking into account that DBE is responsible for task. For example; a proper change management and controls will allow DBE to utilize a preventative and detective control mechanisms to pinpoint project risks which can significantly deter the success of projects, DBE can apply this mechanism during project approval, project reviews as well as testing projects before financing them. Furthermore; this typical factor aids the success of projects by creating a smooth financing operation by allowing DBE to create clear system access, segregation of duties across departments and also allows it to have a clear history and reporting of projects to track progresses.

The other important variables that, this typical factor includes is that effective communication among stakeholders of each projects which include, clients/lessee, branch offices, district offices, logistics providers such as ELSE, customs office and others. As it has been mentioned earlier, for this financing modality DBE is entitled to provide capital goods which, the client request from branch offices approved by districts and proceeded to procurement at the head office. This process includes tasks such as sealing contracts with suppliers, dealing with logistics providers to transport the goods into the project location, performing custom clearance operations, facilitating and controlling the installation, commissioning and other required after sales services for the projects. Thus; without an effective communication mechanism between this stakeholders the projects are doomed to fail by increasing overhead costs of projects, extending delivery times and by crating misinformation's among stakeholders degrading clients trust on the bank.

Overall; for DBEs lease projects success, this particular factor should be given a great emphasis, by implementing adequate project management tools and methodology and by performing regular project performance monitoring and feedback collection so project risks can either be mitigated or to allow DBE to consider project risks in the planning and implementation phases of projects.

4.6.4. Organization related factors

Our findings from SPSS factor analysis indicate that "organization related factors" ranked fourth in their order of importance influencing the success of DBE lease financed projects. This particular CSF consists of five variables, their loading from the highest to the lowest is "provision of sufficient training" with a value 0.783, "allowable amount of budget for capital goods procurement" with a value 0.771, "DBE organizational culture in project implementation" with a value" 0.708, "appropriateness of organizational structure" with a value of 0.671 and "top management's commitment" with a value of 0.669.

Belassi and Tukel (1996), mentioned that organizational related factors are the ones that, affect the project's organizational support towards projects/programs. This, organizational support towards projects is dependent on the organization culture in implementing projects, it is evident that, financing projects through leasing/rent is a recent introduction to Ethiopia and DBE is the first organization to introduce the system. Due to this reason the employees of the bank have a limited exposure to build a good organizational culture which supports the modality. The lack of proper organizational culture for this particular program across DBE is contributing a hand in influencing the success of lease projects, thus; it is critical for the bank to provide sufficient training to employees to improve skill and awareness, this is proved by this study findings by looking this typical variable loading.

Similarly; Tukel and Rom (1995) also agreed that, top management support is one of the most vital factors for projects' success, independently of the industry, which is one of this study dependent variable under this organizational factor. It is important that, top managements to involve and support programs so, decisions can be made quickly, project risks can be addressed at the right moment and also to motivate and encourage employees. The lease financing modality by DBE allows only a limited amount of budget for single projects which is only up to 35Million ETB. Thus; the type of capital goods that the clients wants to acquire is dependent on the amount of funding the lessee can get. Thus; adequate financial resources serve as the pivot around which

everything else revolves, and if projects are forced to make their decision based on the funding amount rather than financial and economic viabilities, the success of the projects is greatly affected because it may lead clients to choose less quality capital goods and may also force them to limit their capacities.

We can conclude that, the organizational factor is critical for the lease projects success, and to ensure this desired goal DBE has improve lack of awareness by the stake holders regarding the financing modality, has to provide sufficient budgeting and must build a strong organizational culture which can support the program.

4.6.5. Lessee/client related factors:

Based on this study context, the clients are called the lessee since, the lease financing modality allows them to be acquire capital goods in the form of a rent for a specified time until they can pay the principal finance used to purchase the capital goods. This typical CSF is found to be the fifth important factor among the total eight and it has three variables "client's willingness to take risk", "clients' decision making" and "the lessee previous experience" with loadings 0.813, 0.791 and 0.763 respectively.

The success of projects depends on client's experience, influence, ability to make timely decision, clear and precise goals, risk attitude, ability to participate in different phases of project (Christopher and Debadyuti (2015), Murat & Mohammed (2019), Mamaru Ing-Esayas, & Sintayehu (2016). This particular factor is not registered into our top three factors, however; the lessee willingness to take risk is critical for the success of these projects since, the financing modality does not involve the need to contribute an equity in the form of collateral by the lessee. And if clients are not committed enough to share project risks and to be the part of the solution, it will be difficult for the bank to support lease projects into success.

Similarly; client's decision making ability and their previous experience has also significant effect on project success, since the financing modality allows the clients to choose capital goods suppliers and technology, where selecting the proper technology for projects and choosing a reliable suppliers or service provider is one of the crucial variable to success. Furthermore, this financing system is designed to target SMEs which has a limited experience dealing with suppliers and

selecting technologies. Thus; it is crucial to the bank to consider the clients/lessee compatibility in their KYC study of projects to avoid or reduce the bad influence that can affect the success of lease projects because the influence of this particular factor is significant.

4.6.6. Project manager related factors:

Here; it must be noted that, the project manager in a lease financing modality program at DBE is a person assigned by DBE, specifically the bank employee who is from CGPSD directorate, since the directorate is responsible for the project starting from the procurement of the capital goods requested by the clients up to the delivery of a fully operational capital goods including the logistics tasks, installation, commissioning and testing of various machineries. Based on the factor analysis conducted this factor is ranked the sixth most important factor which consists of four variables. Among the four Project manager related factor variables "adequate leadership management and coordination skills of managers" have the highest loading of 0.768, followed by "project manager's ability to adopt to changes and their skill of managing risk", "the mandate of the managers to make important decisions" and "the technical experience and competence of the managers" with loadings 0.683, 0.607 and 0.527 respectively. This typical factor is also another important success factor since a number of studies have found that project manager factors are important because project manager's efforts can contribute to the success of a project. According to (Christopher Ngcho (2017), Seiler, S, Verburg, R. M., Bosch-Sijtsema, P., Vartiainen, M. (2013)) project managers competence is a critical factor in the planning and execution of a project. Leadership, organizational, and coordinating skills of project managers are also among the factors influencing project manager performance. Furthermore; Belassi and Tukel (1996) stated that these are the factors that are directly linked to the project manager's and team member's skills and characteristics. Thus; the variables that, this study considers which are project manager's technical experience and competency, their ability to adapt changes and their skill of managing risk, their leadership, management and coordination skills as well as the power they have to make important decisions will have a direct effect on the success of this projects, because as Pinto and Slevin (1989) study also revealed that appointing project managers with the appropriate administrative and technical skills is an important factor for successful project completion. Thus; the project managers that are assigned for each lease projects by DBE must fit this profiles so, they can achieve the intended objective. Failing to stress this typical factor may lead to oversee project risks, to

misunderstood technical and technological preferences of capital goods, miscommunications and misinformation's may arise among team members as well as inappropriate measures and decisions to be made in managing project issues, thus; it is important for DBE to develop competent project managers.

Moreover, selecting a competent project manager helps to crate and improve team's competence which is found to be more crucial during a typical project cycle, this factor is also supported by Belassi and Tukel (1996) which stated project manager related factors also affect project acceptance and client satisfaction as much as they affect the project's performance.

4.6.7. Project Nature related factor

The seventh important factor for the success of lease financed projects by is found to be "project related factor". This factor includes three variables, with the highest loading 0.792 belongs to "The location as well as the site condition of the projects" followed by "The uniqueness of the projects" and "Complexity (Type, and size) of the projects" with loadings of 0.757 and 0.726 respectively.

Even if this particular factor has a relatively lower influence compared to the other six factors, our analysis revealed the project's characteristics has a considerable effect to the success of lease financed projects. According to Belassi and Tukel (1996) some of the most important variable that can be related to a typical Project Natureare the size and the value of a project, the density the uniqueness of project activities, and the local environment that this projects operate.

During the financing of this lease projects the bank should take the account of their relative size to avoid unwanted issues during implementation, for example; a relatively large projects usually exceed their schedule's deadline, and they consequently suffer from imposed penalties such as loss of credibility and various monetary/ financial sanctions. Therefore, the bank should be aware of the project's size while considering the past trend on similar projects that DBE financed successfully with the type of the undertaken project.

Furthermore; projects which are unfamiliar or unique projects have the potential to fail, due to their uniqueness, project team members and managers will face difficulties to define project activities and to take the right decisions to help for success. Therefore, lease financing requests from clients to the bank must be thoroughly checked for their familiarities so, this critical variable can be considered during implementation. The other variable that, is considered is that of the local

environment projects are intended to operate, the local environment includes factors such as location of projects which is another critical aspect for the success of projects. Since, the location of projects linked to availability of required resources for operation and availability of market for products, making sure projects are located at the right location is essential for lease projects to succeed. Similarly; similar studies and authors also agreed that by giving emphasis on the characteristics of project itself is a success factor for projects (Belassi and Tukel (1996), Finch (2003), Potti, Shiva and Gopalkrishna (2014), Christopher and Debadyuti (2015), Murat & Mohammed (2019). Thus; DBE lease projects success is significantly impacted by this typical factor.

4.6.8. Procurement and contract related

Procurement and contract related success factor rank the least important based on the study findings, this factor has two variables namely, "effective contract administration and formulation" and "effective procurement method" with loadings 0.895 and 0.865 respectively. The lease financing modality of DBE involves the procurement of the capital goods and making contract with suppliers on behalf of the lessee since, the capital goods belong to DBE even if the selection is based on client's request. Thus; this factor effect on the project success is critical. Despite being the least important factor based on the study finding, it still important success factor for projects as stated by the similar findings by Mamaru IngEsayas, & Sintayehu (2016), Zakar, Michael & Alan (2016).

In order to understand the relationship of this factor and the success lease financed projects, it must be noted that CGPSD at the head office is solely responsible for capital goods procurement and contract related tasks according to the bank financing procedure. As a result this particular success factor directly concerns CGPSD and the effectiveness of the directorate performing this task will help the success of the projects. According to the study conducted by (Imran Mehmood, 2017) Leading to problems in providing necessary equipment and equipment delivered with incorrect specifications, the project's acquisition method is critical to project success.

During the lease financing operation without an effective procurement method or without in-depth understanding of requirements by all business units, identifying the right supplier for meeting those requirements, periodically evaluating supplier performance, and without a proper contract negotiations: lease projects will face a danger of acquiring wrong capital goods, incomplete project

deliveries, stuck with suppliers which are incapable of delivering aftersales services and also may lose cost advantages that clients may get by negotiating with the right supplier. Similarly; effective contract administration and formulation is also another important variable because without it projects planning will be flawed, negotiation with suppliers will be compromised, and execution and performance of project contracts may fail to deliver their objective according to time and budget. Thus; procurement and contract-related factors are essential in determining project success and DBE should have an effective mechanism to accomplish the task.

4.7. Critical Success factors Inter-relationship

The last objective of this study is to determine or to explore the inter-relationship between the identified CSFs, which affect the success of DBE lease financed projects. To determine the intra-relationship the data that is collected through the developed questioner was tested for its normality by using SPSS on Kolmogorov-Smirnova and Shapiro-Wilk scale, and the data is found to violate the rule of normal distribution (Table 4.8) or the data violates the original assumption because, the numbers at column Sig. of the test shows the statistical significant of relationship when ρ value is less than point zero five (0.05). Therefore, non-parametric Spearman's correlation was used to find the relationship between selected factors. Spearman's rank-order correlation test is applied and it is used to determine if there is a significant relationship between this selected factors. Hair et al. (2007) suggests to apply the 'rules of thumb to analyzing the level of relationship between variables, for data's which have this kind of distribution as shown in the following table:

Table 11: Test of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PNR1	0.264	92	0.000	0.797	92	0.000
PNR2	0.376	92	0.000	0.689	92	0.000
PRN3	0.397	92	0.000	0.688	92	0.000
PMRF1	0.258	92	0.000	0.855	92	0.000
PMRF2	0.303	92	0.000	0.802	92	0.000
PMRF3	0.378	92	0.000	0.697	92	0.000
PMRF4	0.337	92	0.000	0.807	92	0.000
PMRF5	0.245	92	0.000	0.822	92	0.000
PMRF6	0.396	92	0.000	0.672	92	0.000
PMRF7	0.292	92	0.000	0.835	92	0.000
PACR1	0.350	92	0.000	0.785	92	0.000
PACR2	0.254	92	0.000	0.840	92	0.000
OR1	0.420	92	0.000	0.644	92	0.000
OR2	0.337	92	0.000	0.779	92	0.000
OR3	0.354	92	0.000	0.785	92	0.000
OR4	0.279	92	0.000	0.832	92	0.000
OR5	0.339	92	0.000	0.811	92	0.000
CR1	0.317	92	0.000	0.780	92	0.000
CR2	0.350	92	0.000	0.765	92	0.000
CR3	0.391	92	0.000	0.719	92	0.000
PMR1	0.321	92	0.000	0.768	92	0.000
PMR2	0.305	92	0.000	0.814	92	0.000
PMR3	0.337	92	0.000	0.779	92	0.000
PMR4	0.362	92	0.000	0.728	92	0.000
SR1	0.374	92	0.000	0.752	92	0.000
SR2	0.368	92	0.000	0.769	92	0.000
SR3	0.359	92	0.000	0.780	92	0.000
SR4	0.297	92	0.000	0.811	92	0.000
SR5	0.293	92	0.000	0.783	92	0.000
SR6	0.312	92	0.000	0.834	92	0.000
BAWER1	0.332	92	0.000	0.806	92	0.000
BAWER2	0.380	92	0.000	0.745	92	0.000
BAWER3	0.386	92	0.000	0.727	92	0.000
BAWER4	0.265	92	0.000	0.801	92	0.000
BAWER5	0.358	92	0.000	0.778	92	0.000
BAWER6	0.418	92	0.000	0.680	92	0.000
BAWER7	0.362	92	0.000	0.752	92	0.000
BAWER8	0.321	92	0.000	0.816	92	0.000
BAWER9	0.281	92	0.000	0.835	92	0.000

a. Lilliefors Significance Correction P-value <0.05 (data is deviated from normal distribution)

Table 12: Hair et al. (2007) Rules of thumb

very week	0.00- 0.19
week	0.20 - 0.39
moderate	0.40 - 0.59
strong	0.60 - 0.79
very strong	0.80 - 1.00

Table 13: Spearman's rho correlations among selected critical success factors

			PCRF	PMRF	PACR	OR	CR	PMR	SR	BAWER
Spearman's rho	PNR	Correlation Coefficient	1.000	0.141	.213[*]	0.129	-0.085	0.101	.255[*]	0.191
		Sig. (2-tailed)		0.180	0.042	0.222	0.418	0.336	0.014	0.067
		N	92	92	92	92	92	92	92	92
	PMRF	Correlation Coefficient	0.141	1.000	0.141	0.047	-0.172	0.116	.285[**]	0.126
		Sig. (2-tailed)	0.180		0.179	0.660	0.101	0.272	0.006	0.230
		N	92	92	92	92	92	92	92	92
	PACR	Correlation Coefficient	.213[*]	0.141	1.000	-0.009	-0.026	0.086	0.121	0.095
		Sig. (2-tailed)	0.042	0.179		0.933	0.806	0.413	0.249	0.367
		N	92	92	92	92	92	92	92	92
	OR	Correlation Coefficient	0.129	0.047	-0.009	1.000	0.129	.247[*]	.417[**]	.287[**]
		Sig. (2-tailed)	0.222	0.660	0.933		0.222	0.018	0.000	0.006
		N	92	92	92	92	92	92	92	92
	CR	Correlation Coefficient	-0.085	-0.172	-0.026	0.129	1.000	.349[**]	0.144	0.121
		Sig. (2-tailed)	0.418	0.101	0.806	0.222		0.001	0.171	0.251
		N	92	92	92	92	92	92	92	92
	PMR	Correlation Coefficient	0.101	0.116	0.086	.247[*]	.349[**]	1.000	.423[**]	.256[*]
		Sig. (2-tailed)	0.336	0.272	0.413	0.018	0.001		0.000	0.014
		N	92	92	92	92	92	92	92	92
	SR	Correlation Coefficient	.255[*]	.285[**]	0.121	.417[**]	0.144	.423[**]	1.000	.491[**]
		Sig. (2-tailed)	0.014	0.006	0.249	0.000	0.171	0.000		0.000
		N	92	92	92	92	92	92	92	92
	BAWER	Correlation Coefficient	0.191	0.126	0.095	.287[**]	0.121	.256[*]	.491[**]	1.000
		Sig. (2-tailed)	0.067	0.230	0.367	0.006	0.251	0.014	0.000	
		N	92	92	92	92	92	92	92	92
*. Correlation is significant at the 0.05 level (2-tailed).										
**. Correlation is significant at the 0.01 level (2-tailed).										

Relationships among factors:

Project Nature related factor (PNR) has statistically significant relationship with two factors namely, Procurement and contract related factors and supplier related factors where $\rho = 0.042$ & $\rho = 0.014$ (< 0.05) respectively. However; the relationship (PNR) has with the procurement and contract related factors (PACR) and supplier related factors (SR) is a weak positive relationship as the correlation coefficient, rs = 0.213 & rs = 0.255 respectively.

Projects management related success factors (PMRF) has statistically significant relationship with only supplier related success factor (SR) where $\rho = .006$ (< 0.05). And this typical relationship is weak positive relationship since, the correlation coefficient, rs =0 .285.

Similarly; Procurement and contract related success factor (PACR) has significant relationship with only Project Nature Related success factor (PNR) where $\rho = 0.042$ (< 0.05). And this typical relationship is also weak positive relationship since, the correlation coefficient, rs= 0.213.

The fourth ranked critical success factor Organization related success factor (OR) according to its importance has a significant relationship with three success factors, namely, project manager related success factor (PMR), supplier related success factor (SR) and business and work environment related success factor (BAWER), where the $\rho = 0.018$, $\rho = 0.0001$ & $\rho = 0.006$ respectively. Coming to the intensity of the relationship, OR has a moderate relationship with SRF with correlation coefficient value, rs= 0.417. However; OR relationship with PMR and BAWER is the weak side having a correlation coefficient value, rs= 0.247 and rs= 0.287 respectively.

Lessee/client related success factors (CR) has statistically significant relationship with only Project manager related success factor (PMR) where $\rho = .0001$ (< 0.05). And this typical relationship is a weak positive relationship since, the correlation coefficient, rs = 0.349.

Project manager related success factor (PMR) is ranked sixth based on its importance influencing the success of lease financed projects by DBE. The success factor has a significant relationship four success factors namely, organization related success factor (OR), lessee/client related success factor (CR), supplier related success factor (SR) and business and work environment related success factor (BAWER) significant $\rho = 0.018$, $\rho = 0.001$, $\rho = 0.0001$ & $\rho = 0.014$ respectively. PMR has a positive moderate relationship with SRF with a correlation coefficient value, rs= 0.423,

however; PMR relationship with the other three factors ORR, CR and BAWER is a positive weak with a correlation coefficient value, rs= 0.247, rs=0.349 and rs= 0.256 respectively.

Supplier related success factor (SRF) is the second most important factor influencing DBE lease financed projects, this typical factor has a significant relationship with five success factors where all have a $\rho > 0.05$. This five factors are Project Nature related success factor (PNR) with a $\rho= 0.014$ and it has a positive weak relationship with SR with a correlation coefficient value, rs= 0.285, the second significant relationship is with project management related success factor (PMRF) with a $\rho= 0.006$, and a weak positive relationship with a correlation coefficient value, rs= 0.285, the other significant relationship SR has is with organization relationship success factor (OR) where $\rho= 0.0001$ and between this two factors there is a moderate positive relationship with a correlation coefficient value, rs= 0.417, the other positive moderate relationship is between SR and project management related success factor (PMR) with $\rho= 0.0001$ and a correlation coefficient value, rs= 0.423. The fourth and final significant relationship which is a moderate positive one is between SR and business and work environment related success factor (BAWER) with $\rho= 0.0001$ and a correlation coefficient value, rs= 0.491.

According to the factor analysis the study conducted Business and work environment related success factor is the most important success factor (BAWER), the factor has a significant relationship with three factors namely organization related success factor (OR), Project manager related success factor (PMR) and supplier related success factor (SR). All the three BAWER is significant with a $\rho > 0.05$. BAWER has a positive moderate relationship with SRF with a correlation coefficient value, rs= 0.491, while, a weak positive relationship with OR and SR with a correlation coefficient value, rs= 0.287 and, rs= 0.256 respectively.

This typical study last specific objective is to identify the relationship among the success factors and as we can see from the above discussion the relationships among factors fails between weak and moderate relationships according to Hair et al. (2007) Rules of thumb., the following section discuss this relationship based on the correlation analysis output from SPSS this result indicate that the factors influence is not only to the project's success but also influence each other.

Based on the above summary of intra-relationship results, it is evident that there is a significant inter-relationship between majorities of factors, the correlation coefficients between the factors are manifested as a weak or moderate relationships. Supplier related success factor has a moderate and

weak relationship with most of the factors, however; Project Nature related success factors, project management related success factor, procurement and contract related success factor and lessee/client related success factor exhibit only single relationships for each. While Project manager related success factor has four inter-relationship, the other two CSFs register three significant relationships each. Hence, based on the finding, it might be concluded that the success factors do not just influence the success of the projects but also each other. Moreover while contributing to project success they influence other input parameters (success factors) as well. These findings support the theory by (Inna didenko & Ivan konovets 2008) which states that, different project success factors do not exist independently of one another.

4.7.1. Moderate relationships among factors

Supplier related factor is found to have a moderate relationship with three factors namely, organization related success factor, project manager related success factor as well as with business and work environment related success factor. According to Potti Srinivasa Rao, Shiva Prasad H C, and Gopalkrishna B (2014) Contractor experience, knowledge, contractor/supplier confidence in the team, and contractor project management are all supplier-related factors. And these factors, have a significant impact on project success. Thus; a typical organization in this case DBEs organizational culture, structure, top management commitment, allowable amount of funding for projects and training availability for employees. This variables can directly influence the selection of suppliers during procurement, since a well-developed organizational culture and structure allows the bank to allocate the right person or project manager to deal with the issues related to contractor selection, and also to perform an effective contract administration and management, at the same time the availability of a continues skill developing trainings will help the project managers in the bank to develop experience so they can make the right decisions. Similarly; the allowable amount of budget allocated for individual projects directly impact the type of supplier selected for lease projects, to have a clear understanding on this issue let's look the following scenario. As it has been mentioned earlier the financing modality targets SMEs with a limited capital, and most of this lease clients tend to prefer suppliers from countries like china and India due to the chipper price of capital goods compared to suppliers from Europe and America. Thus; the amount of allowed for this lease clients forcing DBE to select suppliers that can supply with in the affordable limit of the clients.

The other moderate relationship is observed between supplier related factor and PM related factor, since, Pinto and Slevin (1989) discovered that appointing project managers with appropriate administrative and technical skills is an important factor for successful project completion. Project managers are responsible for capital goods procurement and delivery of this goods in their fully operational form to the clients, thus; their competency, experience, their ability to make important decisions, their leadership ability as well as their ability to manage risks will have a direct influence on how DBE deals with the suppliers including selecting contractors/suppliers. Because a well experienced and informed PM will have a better chance of spotting reliable suppliers, will consider supplier related issues before committing into contract, after contacts are made experienced PMs will have a better efficiency in managing and administrating contracts and also competent PM will coordinate the other stake holders with the suppliers. Base on this argument we can conclude that the choices and decisions that a project manager make will directly affect the performance of suppliers in DBE lease financed projects.

The other moderate relationship is observed between the two most important critical factors for the success of lease financed projects by DBE based on the study finding discussed earlier. According to Morris and Hough (1987), this external factors have an impact on projects at all stages of their life cycle. As an example, they stated that natural disasters and Political conflicts could have an impact on a project at any stage of its life cycle. This finding is validated by the study finding because factors such as political stability and the socio-cultural issues which have a direct influence on the willingness of the suppliers to engage in contract with the project, and even after engagements instabilities and riots will hamper their ability to commit contract obligations. On the other hand, this external factors such as location of projects, irregular seasons and availability of access and utilities like electric power and water has also a direct relation with the suppliers efficiency to deliver a fully operational items on time by interrupting pre-plan schedules and limiting their ability to acquire the required resources that may be needed for testing and commission purpose during installation. Furthermore; variables such as economic related factors such as exchange rate inflation and price changes and escalation as well as technical and technological related familiarities of capital goods have a direct influence on DBE an also on the clients on the choice of suppliers. For example, inflation of capital goods limits the ability of the client to acquire with a limited budget, similarly; the inflation of foreign currency exchange will harm the capacity of the bank to purchase goods in the global market. When we look to the

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technological preference of the clients, most of them resembles to prefer a familiar once even if the technology is outdated, considering only the availability of manpower for operation and maintenance as well as having caserns on the availability of spare parts in the local market. Thus; this external factors have a direct influence on supplier's selection, their ability to commit to contract obligations and their efficiency in delivering the required product.

4.7.2. Weak relationships among Factors

According to the correlation analysis output seven variables have a weak relationship amongst themselves. Supplier related factor has a weak relationship with Project Nature related factors and project management related factors. The first relationship we will discuss is between SRF and PNR, this relationship explains that, project nature related factors such as project size uniqueness and location of a typical project has an influence on the selection of supplier's. Because project size and uniqueness directly related to suppliers capabilities to deliver items according to the project demand and also their specialization or experience to fulfil the particular project unique needs. Similarly; project nature also influence procurement and contract related issues, since every project is unique in nature require a type of contract which suits its needs, different projects require different kinds of contracts for example, turnkey projects require a contract with a scope that span from planning to handover, projects which require only service need demand service contracts and etc. thus; we can conclude that, project size, uniqueness and location has a hand in selecting DBE lease financing program suppliers as well as the type of contract and procurement approach the bank prefers to use for requests.

According to (Belassi & Tukel, 1996, p144) the size, value, and uniqueness of a project's activities can be difficulty to a project manager who is used to planning and coordinating common and simple activities, and the relationship between SR and PMRF relationship explains that, project manager related factors such as project size uniqueness and location of a typical project has an influence on the selection of supplier's since the PM is in charge of the task and dealing with the supplier. Project management factor includes variables such as project control and change management, stake holders have effective communication, project performance monitoring and feedback collection, and quality assurance system and also adequate project management tools and methodology will determine the effectiveness of suppliers to deliver capital goods according to specification, on budget and on time. And Pinto and Slevin (1987) stated that effective

communication among all project participants is one of the key factors of the key factors of PMR, in case of this study the suppliers are one of the major participants in lease projects. Thus; DBEs project management culture and capacity will directly affect the effectiveness of the bank engagement with suppliers and also the supplier's engagement with the other stake holders such as clients and concerned government organs like immigration and custom authorities.

A Guide to the Project Management Body of Knowledge (PMBOK® Guide) mentioned that, project manager's responsibilities include, to plan and develop the project idea, create and lead project teams, monitor project progress and set deadlines and to ensure stakeholder such as clients satisfaction. And the study findings of factors relationship validates this roles of PM because the findings indicate that, project manager's related factors and three other factors namely, organizational related factor, business and work environment related factor and lessee/client related factor has a relationship. The relationship between PMRF and OR can be understood based on DBEs organizational culture, the bank structure, and top management's commitment to assist project managers in decision making, giving continuous trainings to develop their skill as well as the suitability of working culture of the bank providing the required freedom and responsibility to the project managers. Thus; a well-developed organizational structure and culture will create an effective project managers, on the contrary a weak organization will hamper project manager's efficiency influencing the success of projects at the same time.

According to Kerzner (2013), project management entails project planning and monitoring, while effective project management entails achieving project goals within time and budgetary constraints while still delivering the desired performance level together with effective and efficient use of resources. Thus, based on the research findings the relationship between PMR and BAWER can be explained, in terms of the experience, understanding and awareness of the external environments of the project which guide the choice of project management style by DBE to be implemented for particular projects. And also it must be noted that, the situation of the external environmental factors to the projects will have a significant influence on the decisions that the project team makes, a stable environment will help team to accomplish is objective easily while, a chaotic environment will influence the efficiency also influencing projects success. The next relationship that the study will discuss is between PMR and lessee/client related factor, it is evident that a constructive relationship between clients and project managers will help success of projects in general. (Prabhakar, 2008 and Cooke-Davies, 2002) addressed the achievement of customer

satisfaction along with the end result that has a critical effect on the perceived success or failure of projects, and this require a greater understanding of the PM about clients need. For this study this relationship is between a professional from DBE and a lessee, a committed client who has experience, ready to take risks and willing to make important decisions will assist the PM to perform his duties effectively, to the contrary if clients are not committed well enough the PM will have a difficulty in understand of clients need and positions regarding project issues and vice versa.

The next two relationships are found between procurement and contract related success factor and Project Nature related success factor and between organizations related success factor and business and work environment related success factor. Based on Potti, Shiva and Gopalkrishna (2014) study effective contract formulation and contract administration which suits project nature is critical for their success. Even if the relationship between PACR and PNR is weak, the connection is direct, because the nature of projects like size, type, location and uniqueness will dictate the type of contract required and the control and contract administration needed. For example for projects which need PNP (Plug and play) capital goods may have a relatively simpler contracts and administration and for projects which are turnkey may require a longer time to implement as well as a more thoroughly detailed contract and a more complex contract administrations.

The last relationship we have based on the study finding is between OR and BAWER, according to Steinfort and Walker (2011), adequate organizational structure is essential for project success and, this relationship can be understood us the culture, organizational structure and the commitment of DBE top management to deal and handle the external factors and issues that may influence projects. From the study findings it is evident that, availability of public utilities, inflations and price changes are one of the major influencing factors to DBEs lease financed project's success, and if the bank performance as an organization is not ready and is not committed to take the necessary decisions also take actions accordingly, the projects are the one which will suffer the burden. Thus; the bank must have an organizational structure and culture which can accommodate this external issues, similarly; decision for most of the external factors cannot be given by lower level mangers forcing the commitment of the top manager's to involve in the project decision making. Therefor; the bank organizational structure as well as working culture will be influenced by the external environmental factors.

4.7. Diagrammatic representation/ model for DBE lease financed projects:

The diagrammatic representation model of DBE financed lease project success that was constructed by the study in regards to the thirty nine (39) individual success factors and eight (8) extracted principal components that has been explored or identified by the detailed analysis result of this project work is shown in the following figure. This model is intended to show the degree of importance of this CSFs to lease financed projects by DBE as well as the intra-relationship they have amongst themselves, as well as to create a clearer representation or view regarding the output of the analysis conducted by the research.

Figure 5: DBE lease financed projects success model

Chapter Five

5. Conclusion and Recommendation

5.1. Conclusion

The general objective of this particular research paper is to identify and explore CSFs that have an influence or impact on the successes of SME projects financed through capital goods leasing by DBE. Based on the theoretical and empirical reviews conducted by the study, various CSFs have been identified. The identified CSFs were then analyzed by the researcher by using SPSS software. In doing so, principal component analysis, including descriptive and other related statistical econometric analysis methods were used. The data that is used by the project paper is collected from DBE employees located at branch offices, district offices and head office who are involved in the lease financing loan modality, the data was gathered by using a questioner through hard copy and email. Then the employee's respected judgments were computed and analyzed for the purpose of extracting CSFs, measuring their level of importance and to figure out the relationship among the CSFs. Before conducting further analysis, most importantly the collected data was checked for reliability and found to be valid or significantly passed all statistically and/or econometrically tests.

According to the study's empirical findings and subsequent analyses, the success of DBE lease financed projects are dependent on project nature related factors, project management related factors, organization related factors, procurement and contract related factors, lessee/client related factors, project manager related factors, supplier related factors, and business and work environment related factors. From the identified eight CSFs, Client-related, supplier related, organizational related factors and project management related success factors are stakeholder based, whereas project-related success factors are based on project characteristics. Business and work environment factors are factors that address all external environmental issues that impact project success.

The factor analysis conducted show, that external and work environment factors are the most important, followed by supplier related factors and project management related factors, project nature related factors, and procurement and contract related factors are the least important in order of importance.

Furthermore; the study findings shows that this CSFs while contributing to lease project success they also influence the output of the other CSF. This influence is expressed in terms of relationships by the study, Based on non-parametric Spearman's correlation test the study conducted on the CSFs three moderate seven weak relationships was identified.

Moderate relationships were found between organization related success factor and supplier related success factor, project manager related success factor and supplier related success factor and between supplier related factor and business and business and work environment related success factor, where relatively stronger influence is expected to exist.

A relatively weaker but positive relationship is found between Project Nature related success factor and supplier related success factors, between project management related success factor and supplier related success factor between procurement and contract related success factor and Project Nature related success factor, between organization related success factor and project manager related success factor, between organization related success factor and business and work environment related success factor, between lessee/client related success factor and project manager related success factor and finally between project manager related success factor and business and work environment related success factor.

5.2. Recommendation

The following recommendations are made based on the study findings:

- The study findings indicate that business and work environment factors are the most important factors for the success of DBE lease financed projects. This particular factor explains the external environments that this projects exist. For the sake of this financing modality success and projects success DBE should collaboratively work with this external stakeholders such as with custom authority and ELSE so, the logistics and custom clearance operations could conducted in a shorter time with a less overhead cost to projects. Similarly; DBE must work with public utility providers like Ethiopian Power Corporation to reduce the delay on projects caused the utility issues. On the other hand lease projects are suffering from currency exchange inflations to acquire capital goods, DBE has to establish a better serving mechanism for client requests by reducing the time span from request up to product delivery.

- The study identifies supplier related factors as the second most important factor for the success of DBE lease financed projects, since this loan modality is based on funding projects by providing them capital goods in the form of rent: the supplier related factors criticality is undeniable. However; the other factor discussed by the study is procurement and contract related factor which has a link with capital good suppliers considering the fact that the contract engagements are with this party. Thus; DBE contracts should be based on equitable contractual obligations maintaining the control on supplier's ability to deliver products. Thus; DBE must develop a staff members and PMs capable of evaluating suppliers for their reputation, competency as well as reliability. Furthermore, the bank should follow a transparent policy and procedures for awarding contracts to execute the project, by shifting the traditional practice of awarding to the "lowest bidder" to an approach that improves project performance at the same time with a reasonable cost.

- According to the study findings organizational cultures and structure as well as project management practice of DBE plays a major role on the success of lease financed projects, Thus; DBE must prioritize improving on the organization culture in managing this projects, by creating an environment which is conducive for effective communication among project stakeholders, by implementing compatible management tools to control, monitor and to collect feedback from projects. To create this conducive environment and strong organizational culture that can support this projects success is the availability of sufficient and regular training for employees. DBEs training programs must also target to improve the efficiency of project managers, since their competency is also essential for lease projects success. At the same time, the bank must develop management information systems and standard project management software to monitor and control the implementation of project success factors: the bank's day-to-day operations must be monitored using standard project management software and an up-to-date management information system.

- Since; the loan modality is intended for SMEs, DBE must create a platform or regular training programs for clients to increase their awareness on project implementation and operation. Also DBE must create a smooth mechanism this clients can get assistant from the bank after the projects are handed to them.

- Similarly; DBEs lease project appraisal and approval process must give a great emphasis on the nature of projects, projects must be checked for their environmental friendless, their unique nature and availability of required resources in close proximity.

5.2.1. Recommendation for future researches.

This typical study focusses on the CSFs that have a potential to affect the success of DBEs lease financed projects for SMEs. To identify and evaluate this CSFs the researcher uses the data that is collected from DBE employees. For future researches that want to study on this subject it is the researcher recommendation to include other stakeholder's judgment like clients and supplier in order to have an in-depth perspective of the factors.

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Annex

Annex A: Communalities & Variance

communalities		
	Initial	Extraction
PNR1	1.000	.792
PNR2	1.000	.757
PRN3	1.000	.726
PMRF1	1.000	.666
PMRF2	1.000	.781
PMRF3	1.000	.687
PMRF4	1.000	.698
PMRF5	1.000	.778
PMRF6	1.000	.514
PMRF7	1.000	.679
PACR1	1.000	.895
PACR2	1.000	.865
OR1	1.000	.708
OR2	1.000	.671
OR3	1.000	.669
OR4	1.000	.771
OR5	1.000	.783
CR1	1.000	.763
CR2	1.000	.813
CR3	1.000	.791
PMR1	1.000	.527
PMR2	1.000	.607
PMR3	1.000	.683
PMR4	1.000	.768
SR1	1.000	.816
SR2	1.000	.595
SR3	1.000	.753
SR4	1.000	.646
SR5	1.000	.767
SR6	1.000	.675
BAWER1	1.000	.709
BAWER2	1.000	.768
BAWER3	1.000	.583
BAWER4	1.000	.815
BAWER5	1.000	.771
BAWER6	1.000	.557
BAWER7	1.000	.514
BAWER8	1.000	.692
BAWER9	1.000	.780
Extraction Method: Principal Component Analysis.		

<table>
<tr><td colspan="7">Total Variance Explained</td></tr>
<tr><td rowspan="2">Component</td><td>Initial Eigenvalues</td><td colspan="2">Rotation Sums of Squared Loadings</td><td></td><td></td><td></td></tr>
<tr><td>Total</td><td>% of Variance</td><td>Cumulative %</td><td>Total</td><td>% of Variance</td><td>Cumulative %</td></tr>
<tr><td>1</td><td>7.906</td><td>20.271</td><td>20.271</td><td>4.862</td><td>12.466</td><td>12.466</td></tr>
<tr><td>2</td><td>4.045</td><td>10.372</td><td>30.643</td><td>4.002</td><td>10.262</td><td>22.727</td></tr>
<tr><td>3</td><td>3.266</td><td>8.373</td><td>39.017</td><td>3.863</td><td>9.905</td><td>32.632</td></tr>
<tr><td>4</td><td>2.797</td><td>7.173</td><td>46.189</td><td>3.165</td><td>8.116</td><td>40.749</td></tr>
<tr><td>5</td><td>2.301</td><td>5.901</td><td>52.090</td><td>2.759</td><td>7.074</td><td>47.823</td></tr>
<tr><td>6</td><td>1.833</td><td>4.701</td><td>56.791</td><td>2.219</td><td>5.689</td><td>53.512</td></tr>
<tr><td>7</td><td>1.583</td><td>4.060</td><td>60.851</td><td>2.170</td><td>5.563</td><td>59.075</td></tr>
<tr><td>8</td><td>1.281</td><td>3.286</td><td>64.136</td><td>1.974</td><td>5.061</td><td>64.136</td></tr>
<tr><td>9</td><td>0.978</td><td>2.750</td><td>66.886</td><td></td><td></td><td></td></tr>
<tr><td>10</td><td>0.957</td><td>2.638</td><td>69.524</td><td></td><td></td><td></td></tr>
<tr><td>11</td><td>0.939</td><td>2.407</td><td>71.931</td><td></td><td></td><td></td></tr>
<tr><td>12</td><td>0.888</td><td>2.277</td><td>74.209</td><td></td><td></td><td></td></tr>
<tr><td>13</td><td>0.814</td><td>2.088</td><td>76.297</td><td></td><td></td><td></td></tr>
<tr><td>14</td><td>0.777</td><td>1.992</td><td>78.289</td><td></td><td></td><td></td></tr>
<tr><td>15</td><td>0.706</td><td>1.810</td><td>80.099</td><td></td><td></td><td></td></tr>
<tr><td>16</td><td>0.680</td><td>1.745</td><td>81.844</td><td></td><td></td><td></td></tr>
<tr><td>17</td><td>0.645</td><td>1.654</td><td>83.498</td><td></td><td></td><td></td></tr>
<tr><td>18</td><td>0.608</td><td>1.560</td><td>85.058</td><td></td><td></td><td></td></tr>
<tr><td>19</td><td>0.557</td><td>1.428</td><td>86.486</td><td></td><td></td><td></td></tr>
<tr><td>20</td><td>0.518</td><td>1.327</td><td>87.813</td><td></td><td></td><td></td></tr>
<tr><td>21</td><td>0.486</td><td>1.247</td><td>89.060</td><td></td><td></td><td></td></tr>
<tr><td>22</td><td>0.436</td><td>1.119</td><td>90.179</td><td></td><td></td><td></td></tr>
<tr><td>23</td><td>0.417</td><td>1.070</td><td>91.248</td><td></td><td></td><td></td></tr>
<tr><td>24</td><td>0.374</td><td>0.959</td><td>92.207</td><td></td><td></td><td></td></tr>
<tr><td>25</td><td>0.355</td><td>0.910</td><td>93.117</td><td></td><td></td><td></td></tr>
<tr><td>26</td><td>0.345</td><td>0.884</td><td>94.001</td><td></td><td></td><td></td></tr>
<tr><td>27</td><td>0.308</td><td>0.789</td><td>94.790</td><td></td><td></td><td></td></tr>
<tr><td>28</td><td>0.278</td><td>0.712</td><td>95.502</td><td></td><td></td><td></td></tr>
<tr><td>29</td><td>0.255</td><td>0.653</td><td>96.155</td><td></td><td></td><td></td></tr>
<tr><td>30</td><td>0.237</td><td>0.608</td><td>96.763</td><td></td><td></td><td></td></tr>
<tr><td>31</td><td>0.211</td><td>0.540</td><td>97.303</td><td></td><td></td><td></td></tr>
<tr><td>32</td><td>0.184</td><td>0.473</td><td>97.776</td><td></td><td></td><td></td></tr>
<tr><td>33</td><td>0.170</td><td>0.437</td><td>98.213</td><td></td><td></td><td></td></tr>
<tr><td>34</td><td>0.155</td><td>0.397</td><td>98.610</td><td></td><td></td><td></td></tr>
<tr><td>35</td><td>0.146</td><td>0.374</td><td>98.983</td><td></td><td></td><td></td></tr>
<tr><td>36</td><td>0.132</td><td>0.337</td><td>99.321</td><td></td><td></td><td></td></tr>
<tr><td>37</td><td>0.106</td><td>0.271</td><td>99.592</td><td></td><td></td><td></td></tr>
<tr><td>38</td><td>0.091</td><td>0.234</td><td>99.825</td><td></td><td></td><td></td></tr>
<tr><td>39</td><td>0.068</td><td>0.175</td><td>100.000</td><td></td><td></td><td></td></tr>
<tr><td colspan="7">Extraction Method: Principal Component Analysis.</td></tr>
</table>

Annex B: Questioner

A Questioner developed for a Master's Project Research to School of Commerce of Addis Ababa University in Partial Fulfillment of the Degree of Masters in Project Management.

I am Samuel Sirak and I am perusing a master's program in masters of project management from Addis Ababa University, school of commerce. As a partial requirement of the master's degree I am conducting a survey for the research "*Critical success factors for projects financed by development bank of Ethiopia: the case small and medium enterprises lease financing*".

Therefore, I need your sincerer cooperation to complete this questioner. Thank you for participating in my research. I would much appreciate if you could spend a few minutes of your time to complete my research. Your participation and the data collected in this questioner is strictly confidential.

SECTION 1

Please mark X or ✓ in the appropriate box.

Age   Below 30   ☐   30- 50   ☐   Above 50   ☐

Sex   Male   ☐   Female   ☐

Educational level   Diploma ☐   Degree ☐   Masters ☐   PHD ☐

Branch   Head office ☐   District ☐   Branch office ☐

If Head office (directorate)   CGPSD ☐   LFFD ☐   IBD ☐

If District/Branch please Specify _____ .

If District/Branch please Specify department   KYC team ☐   PA&A team ☐

Your position in the bank   Director ☐   Team Manager ☐   District/Branch manager ☐

Enginner ☐   Loan Officer ☐

Work experience in the bank   Below 3 years ☐   3- 6 years ☐   Above 6 years ☐

SECTION 2

1. Considering DBE's lease financed projects, to what degree do the mentioned factors in statement section influence the success of SME projects?

Measurement:

Strongly disagree = 1, Disagree = 2, Neutral = 3, Agree = 4 and strongly disagree = 5

Sr.	Statements	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
	Project Nature related					
1	The location as well as the site condition of the projects does not have effect.					
2	The uniqueness of the projects has no effect in their success.					
3	Complexity (Type, size and nature) of the projects has no relation to their success.					
	Project management related					
4	Project control and change management is adequate.					
5	All project stake holders have effective communication amongst themselves.					
6	There is adequate project management tools and methodology.					
7	There is a regular project performance monitoring and feedback collection.					
8	There is effective quality assurance system to ensure standard.					
9	Decision making is effective.					
10	Project risks are effectively addressed, assessed and managed.					
	Procurement and contract related					
11	The bank has effective contract administration and formulation					
12	The bank has effective procurement method					
	Organization related					

13	The bank has a strong organizational culture in the project implementation					
14	The bank organizational structure is appropriate and allows project success.					
15	Top management of the bank is committed in supporting projects.					
16	The allowable amount of budget/funding for the capital goods procurement is adequate.					
17	Sufficient training is provided to develop skills.					
	Client/lessee related					
18	The clients are well experienced on the other similar projects.					
19	Clients are willing to take risks					
20	Clients make appropriate and timely decision.					
	Project manager related					
21	The project managers have enough technical experience and competency.					
22	Project managers are allowed to take important decisions.					
23	Project managers easily adapt to changes and have a skill of managing risk.					
24	Project managers have adequate leadership, management and coordination skills.					
	Supplier related					
25	Capital goods suppliers are committed to contract obligation and has the required competence.					
26	There is an effective after sales service delivery by the suppliers.					
27	The suppliers deliver advanced technology and brand new equipment.					
28	The suppliers have sufficient financial capabilities to deliver the capital goods fully on time.					
29	The involvement of local/third party aftersales provides does not affect the success of the projects.					

30	The selected capital good suppliers are specialized/have experience in particular projects.					
Business & work environment related						
31	Political related issues such as riots and interferences does not have any effect/influence for the success of projects.					
32	Technical and technological related familiarities does not have any effect on the success of projects					
33	Location related factors like road access and difficult geography has no effect on the success of projects.					
34	Public utility related factors such as the availability of electric power and water has no effect on projects success.					
35	Environmental friendliness pre-conditions has no effect on project success.					
36	X-factors such as fraud practices and corruption does not influence project success.					
37	Harsh weather conditions or irregular seasonal changes doesn't have any effect/influence on the project's success.					
38	The socio-cultural issues such as language, culture and customs doesn't have any effect on the project success.					
39	Projects are not affected by economic related factors such as exchange rate inflation and price changes and escalation.					

SECTION: 3

If there are other factors that are not mentioned in the above statement which can have a potential influence on the success of SME projects, please provide your comment below.

a. _____ .

b. _____ .