Determinant of Lease Financing service: In Case of Jimma Zone

A Thesis to be Submitted to the Department of Economics College of Business and Economics, Jimma University in Partial Fulfillment of the Requirements for the Degree of Masters of Science (MSC) in Developmental Economics

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JIMMA UNIVERSITY COLLEGE OF BUSINESS AND ECONOMICS DEPARTMENT OF ECONOMICS

JULY, 2020

JIMMA, ETHIOPIA

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Table of Contents

l.	DECLARATION	VI
II.	CERTIFICATE	VII
III.	EXAMINERS' APPROVALSHEET SCHOOL OF GRADUATE STUDIES	VIII
IV.	Acknowledgement	IX
V.	ABBREVIATIONS AND ACRONYMS	X
VI.	List of Table	XII
VII.	List of Figures	XIII
CHA	APTER ONE	1
1.	Introduction	1
1.1.	Background of the study	1
1.2.	Statement of the Problem	3
1.3.	Research questions	4
1.4.	Study objectives	5
1.4.1	General objectives	5
1.4.2	2. Specific objectives	5
1.5.	Significance of the study	5
1.6.	Scope and limitation of the study	5
1.7.	Organization of the Thesis	6
CHAI	PTER TWO	7
2.	Literature Review	7
2.1.	Introduction	7
2.2.	Theoretical Literature Review	7
2.2.1	L. Definition of Leasing	7
2.2.2	2. Working definition of lease finance	8
2.2 .3	B. Leasing: Concept and Evolution	9
2.2.4	Approaches to Leasing Modalities	10
2.3.	Leasing industry in Ethiopia	14
2.3.1	L. Lease Financing in case of Development Bank of Ethiopia	15
2.3.2	2. Definition of Small and Medium Enterprise	16
2.3.3	B. Eligibility Criteria and Requirement for Lease Financing	16
2.3.4	I. Graduated SME in context of DBE	17
2.4.	Prospects of lease financing	17
2.5.	Determinants of lease financing service	18

2.5.1.	Management	18
2.5.2.	Infrastructure	19
2.5.3.	Firm Level characteristics	19
2.5.4.	Transaction costs	20
2.5.5.	Industry	22
2.5.6.	Effective lending rate	24
2.5.7.	Banks Requirements that makes SMEs eligible for Lease Finance	25
2.6.	Empirical review	26
2.7.	Development of Hypothesis	31
2.8.	Conceptual Framework	32
СНАРТ	ER THREE	34
3. RI	ESEARCH METHODOLOGY	34
3.1.	Introduction	34
3.2.	Description of the Study Area	34
3.3.	Research methods	35
3.4.	Research paradigms	36
3.5.	Research design	37
3.6.	Triangulation	38
3.7.	Definition and measurement of variables	38
3.8.	Population	39
3.9.	Sample Size	40
3.10.	Data Collection	42
3.11.	Methods of Data Analysis	43
СНАРТ	ER FOUR	44
4. D	ATA ANALYSIS AND PRESENTATION	44
4.1.	Introduction	44
4.2.	Background information of the respondents	44
4.3.	Determinants of access to Lease finance	46
4.3.1.	Discussion	47
4.4.	Correlation analysis	49
4.5.	Classical Linear Regression Model (CLRM) Assumptions	52
4.5.1.	Hetroskedasiticity Test	52
4.5.2.	Multicollinearity	53
4.5.3.	Normality Assumption	53

4.6.	Multiple Regression Output and its Discussion	54
4.7.	Testing of Hypotheses	55
4.8.	Opportunities & supply side factors affecting lease financing service.	57
4.8.1.	Opportunities of lease financing service in Development Bank of Ethiopia, Jimma branch	58
4.8.2.	Challenges of lease financing service in Development Bank of Ethiopia, Jimma branch	59
СНАРТ	ER FIVE	60
5. SI	UMMARY, CONCLUSION, RECOMMENDATIONS AND LIMITATIONS	60
5.1.	Introduction	60
5.2.	Summary	60
5.3.	Conclusion	61
5.4.	Recommendations	62
5.5.	Limitations of the study	64
Refere	nces	65
Appen	dix 1	67
Resear	ch Questionnaire	67
Appen	dix II	. 73

I. DECLARATION

I declare that the research thesis entitled "Determinant of lease financing service in case of Jimma zone "submitted to research and postgraduate studies office of business and economics collage is original and it has not been submitted in part or fully to any university or other funding organization.

Declared By:-

Name: Firew Alemayehu

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Date: 03/08/2020

Place: Jimma University, Business and Economics College Department of Economics

(Developmental Economics)

II. CERTIFICATE

We certify that the research Thesis entitled "Determinant of lease financing service in case of Jimma zone" submitted in partial fulfillment of the requirements for the degree of Master's with specialization in Development Economics, the Graduate Program of the Department of Economics and has been carried out by Mr. Firew Alemayehu under our supervision. To the best of our knowledge, it is an original work and not submitted earlier for any degree either at this University or any other University.

Therefore we recommend that the student has fulfilled the requirements and hence hereby can submit the thesis to the department.

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Name of major advisor	Signature	Date
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Name of co-advisor	Signature	Date

III. EXAMINERS' APPROVALSHEET SCHOOL OF GRADUATE STUDIES

We, the undersigned, member of the Board of Examiners of the final open defense by, Mr. Firew Alemayehu have read and evaluated his thesis entitled "Determinant of lease financing service in case of Jimma zone" and examined the candidate. This is, therefore, to certify that the thesis has been accepted in partial fulfillment of the requirements for the degree of Masters in Development Economics.

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Name of Internal Examiner	
Dr. Oumer Beriso (PhD)	

Name of External Examiner

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V. ABBREVIATIONS AND ACRONYMS

ACGFC Addis Capital Goods Finance

ADB Africa Development Bank

ATDF Access to Debt Finance

BODs Boards of Directors

CEO Chief Executive Officer

CGAP Consultative Group to Assist the Poor

DBE Development Bank of Ethiopia

ETB Ethiopian Birr

FeMSEDA Federal Micro and Small Enterprises Development Agency

GDP Gross Domestic Product

GPFI Global Partnership for Financial Inclusion

IAS International Accounting Standards

IASB International Accounting Standard Board

IBRD International Bank for Reconstruction and Development

IFC International Finance Corporation

IFRS International Financial Reporting Standard

ILO International Labor Organization

IMF International Monetary Fund

LDCs Least Developed Countries

MFIs Microfinance Institution

MIS Management Information System

MMR Mixed methods research

MSE Medium and Small Enterprises

MSMEs Micro Small and Medium Enterprise

NBE National Bank of Ethiopia

NSE Nairobi Securities Exchange

OCGFC Oromia Capital Goods Finance Company

OECD Organization for Economic Cooperation and Development

SMEs Small and Medium Enterprise

SSA Sub Saharan Africa

USA United States of America

USAID US Agency for International Development

WB World Bank

WBG World Bank Group

WTO World Trade Organization

List of Table VI.

Table 2.1: Main Types of Leasing.	14
Table 3.1: Definition and measurement of variables	40
Table 3.2: Questioner Administration by Sector	43
Table 4.1: Description of respondents by Age & Gender	46
Table 4.2: Description of respondents by level of Education, years of being	
Member of the enterprise & current position of the respondent	46
Table 4.3: Descriptive statistics.	48
Table 4.4: Correlation Coefficient.	50
Table 4.5: Degree of Multicollinearity for variables.	54
Table 4.6: Decision region for DW test, DW test result test of auto-correlation.	55
Table 4.7: Coefficient of linear Regression	56

VII. List of Figures

Figure 2.1: Conceptual Framework	37
Figure 3.1: Map of Jimma Zone	36
Figure 4.1: Test for Hetroscedacity	53
Figure 2.1: Normality Test.	53

Abstract

This paper was aimed at identifying determinants of lease financing service in case of Jimma zone and also assessing the opportunities & challenges that DBE Jimma branch faces in SME lease financing. DBE, Jimma branch mainly provides lease financing services to SME s found under Jimma zone. This study is mainly based on primary data gathered through structured questionnaires. The population of the study for the supply side analysis was employees under Development Bank of Ethiopia Jimma branch & District and Purposive sampling design has been used on the other hand for the demand side, SMEs found under Jimma zone were used, they are stratified based on their sector and simple random sampling lottery method was used. Questionnaire, key informant interview and document review were used as data collection instrument. Summary statistics from SPSS have been used as analyzing tool for the data collected through questionnaire from SMEs exist under Jimma zone. Based on the result, the study has identified that firm size of SME, Infrastructure and Industry found positive determinant of lease financing service of the bank whereas Banks lease financing requirements are found negatively determine lease finance. major challenges of lease financing service are also found as dearth in banks capital, some banks lease finance requirements have not taken real situation of SMEs into consideration, Lengthy in service cycle time, lack of market for SMEs product and working capital from SMEs side are the challenges of lease financing service in the study area. And opportunity of LFS are found as Hire purchase of lease modality, high market opportunity of lease finance, government support and sector selected by the bank, enhance SMEs development in terms of technology transfer, quality production, and creates employment opportunity, improves export & import substation, helps in resource utilization, creates market opportunity for local machinery producer.

Based on these result the institution is suggested to pay attention to the concerned factors and thus propose an efficient lending policy emphasizing on undertaking sample study on SMEs general existing situation on the ground and amending lease financing policy accordingly that numbers o SMEs accessing lease finance will get increased. Moreover, DBE should also put emphasis on solving those indentified challenges & exploiting the existing opportunities optimally as it intensifying of its services by contributing to the enhancement of the access of SMEs for lease finances.

Keywords: Determinants of lease finance, Lease finance, Small Medium Enterpris

CHAPTER ONE

1. Introduction

This section presents the introduction part of the thesis. Which is contains Back ground of the study, statement of the problem, Research question, Objective of the study, Significance of the study, Scope and Limitation of the study and lastly includes Organization of the Thesis.

1.1. Background of the study

Globally, financial access is one of the most widely discussed topics in business (World Bank, 2004 and 2006; Nair, 2004; and IFC, 2009; CGAP, 2013; IMF, 2013).

Micro and Small Scale Enterprises (MSEs) are lifeblood of most economies. To be successful this and other business sectors, finance plays a major role in any aspect of business operation. As far as micro and small enterprises (MSEs) are concerned as part of business enterprises, they need finance to start up, expand, diversify and for working capital of the business firms. Without finance, no one business enterprise can achieve its objectives. Finance is the backbone of any business enterprise (Mckernan and Chen, 2005) including for MSEs.

Lack of access to finance is the biggest obstacle affecting SMEs, micro enterprises and new firms in developing countries (IFC, 2009). The extent to which the problem of lack of access to bank loans and other non-equity finance exists seems to affect SMEs more than large firms in most developing countries (Claessens, 2006). Access to finance is disproportionately difficult for SMEs in Least Developed Countries (LDCs), with 41 percent of SMEs in LDCs reporting access to finance as a major constraint to their growth and development, as compared with 30 percent in middle- income countries, and only 15 percent in high-income countries (GPFI & IFC, 2011). Yet, many governments have recognized the SME sector as an important driver of economic development and employment creation, and also see as a priority (MIDAS, 2009 in CGAP and IFC, 2013).

As an alternative to bank loans, SMEs have ended up seeking loans from microfinance institutions (MFIs). However, it has been argued by some researchers (e.g. Gallardo, 1997), that MFI loans are not suitable for SMEs, because they are offered on a modular basis which requires SMEs to graduate from very small loans to larger loans and sometimes to access them as a group. The need for new forms of finance, which are appropriate for the sector, with relatively low financial risk to the commercial banks, is important in this regard. Lease finance is regarded as an alternative source of financing for SMEs because it relies on the underlying leased asset

and cash flows as collateral, other than the wealth of the enterprise and the owner (Honohan and Beck, 2007).

Leasing is an alternative instrument to facilitate access to finance; it enables in particular new/young enterprises (OECD, 2012 and 2014)) without credit track record and limited possibilities to provide collateral the use of capital equipment's such, it also mitigates market weaknesses of SME lending.

Among the alternative sources of funding, leasing can be an effective mechanism for boosting the Ethiopian economy by providing long-term finance to SMEs (World Bank, 2015). Thus, an effective approach to financing SMEs is by supporting leasing companies and other financial institutions that serve these enterprises (IFC1, 2009). Leasing companies play an important role in the financing of small and medium-sized businesses, which need funds to expand but often do not have the credit history or collateral sufficient for credit from conventional financing sources. Leasing is a highly flexible alternative as a form of financing with several advantages. One of the most important advantages of leasing is that the leased asset itself is the principal security in a lease arrangement. Enterprises through the world use leasing to finance vehicles, machinery and equipment. According to ILO (2003), in developed (OECD) countries, up to one third of private investment is financed through leasing. Because, leasing gives SMEs the opportunity to create and modernize their operations hence increasing productivity, lowering transaction costs, increasing employment opportunities, increasing business profitability, promoting innovation and creativeness, and increasing product choices (World Bank, 2015).

Despite the fact that, it is generally difficult for young firms to access external financing sources, SMEs' access to leasing seems to develop quicker than the access to other sources of external financing as depicted in Oxford Economics (2011) survey, the relative importance of leasing was highest for relatively young enterprises aged between two and five years.

The concept of leasing is based on the proposition that income is earned through the use of assets, rather than from their ownership (World Bank, 2000; Fletcher et. al., 2005; IFC, 2009). It focuses on the lessee's ability to generate cash flow from business operations to service the lease payment, rather than on the balance sheet or on past credit history (IFC, 2009). This explains why leasing is particularly advantageous for young companies, as well as small and medium businesses that do not have a lengthy credit history or a significant asset base for collateral. Furthermore, absence of collateral requirement with leasing offers an important advantage in countries with weak business environments. Because the lessor owns the equipment it can be repossessed relatively easily when the lessee fails to meet lease rental obligations.

Generally, leasing financing is one of several financial products commonly used by SMEs to support growth. Leasing when available is often the entry point in the financial product spectrum for formal businesses seeking equipment financing and typically targets small businesses that are towards the lower end of any sector, particularly those with no credit history and/or no collateral but with strong cash flow. Leasing finance has a strong positive correlation to GDP per capita growth compared to other SME financing options (World Bank, 2008). Lease financing Industry in Ethiopia is still at the very early stages of development and expected that there are many factors affecting it besides face huge challenges despite the large potential market in the country.

1.2. Statement of the Problem

Generally, as suggested by Ghyoot (2013), leasing as an alternative source of finance has not been given much thought of and taken advantage of in most developing economies (Krishnan and Moyer, 2014). A research by Mohammad and Shamsi (2013) asserted that if the lessee or firm pays little or no corporation tax, it will pass on the capital allowances to the lessor, part of which will be returned to the lessee through lesser rental payments. Secondly, leasing can be seen as a substitute for debt finance because it reduces debt capacity. However, the research left a gap since, given the fact that lessors have first claim on the assets leased, leasing is likely to be advantageous for financially distressed companies that can't fulfill the requirements for getting bank loans. However, the findings noted that firms are faced with great challenge of maximizing shareholders' wealth in amidst of turbulent business environment. Investment firms listed in the NSE employ lease financing because the banks in Kenya charge high interests that keep on fluctuating, the tax implications and the fact that leasing conserves cash (Kibet, et al, 2013). So clearly there is a financial knowledge gap that needs to be addressed. Perceptions must change in order for businesses to properly understand that they have access to cash by means other than the traditional bank loan and overdraft.

According to a research by Tarus, (2013), there exist management gap because little has been done for developing markets. Previously, Tarus (2013) did a research on the factors that influence the growth of finance lease in Kenya. He found out that many firms employ lease financing because it helps in conservation of cash flows and guards the firm against obsolescence despite having a complex accounting practice and legal regulation but nothing was said about how it affects financial performance.

Besides, Globally various researches were conducted with regard to the overall assessment of lease financing service and due to the newness of leasing business locally limited research under

taken related to the topic (such as Abera, 2016; Mohamed, 2014; Kemal, 2012 and Befekadu, 2018) under Addis, Oromiya, Kaza, Debub and Waliya capital good leasing companies. Moreover, the studies have identified many challenges such as lack of availability of low cost and sustainable funding, lack of clarity on interpretation of tax incentives provided by law, lack of leasing expertise in the market, existence of inadequate supply chain linkages, procurement hurdles, existence of limited domestic suppliers, and absence of specialized leasing training center. DBE is the only government financial institution that engages in small and medium enterprises. June 2017 and 2018 Annual reports of the Bank listed out a number of challenges and less performed plan against actual. Lease financing service providing by the Bank is a new research area and challenges have been facing by the Bank initiated the researcher to conduct in this particular area. In fact, Determinants of lease financing service in Jimma zone is a new research topic and needs further study. Moreover, the researcher is going to identify Determinants of lease financing in Jimma zone, so as to verify whether the identified factors are similar with that of the conducted studies by international and local researchers. In addition, the conducted research by Befkadu, 2018 among DBE, OCGF and ACGF is focused only DBE at head office but, lease financing service is not providing at head office level and the service has been providing through District and Branch offices. and also Research such as Abera, 2016 and Befikadu, 2018 on their researcher they conduct on challenges & opportunity of lease finance only from the side of DBE(Financer side) and hence these research ought to identify including the Demand side(SMEs) factors affecting to access lease finance. This study work is differing from that of the above-mentioned study in that: This study is sought to find answer for Determinants of lease financing service: a case study of Jimma zone.

1.3. Research questions

- What are the Demand side (SME) factors that affect the development of lease financing in Jimma zone?
- What Supply side factors affect lease financing in Development Bank of Ethiopia, Jimma Branch?
- What are the potential prospects and opportunities that initiate the growth and development of leasing industry in the study area?

1.4. **Study objectives**

1.4.1. **General objectives**

The general objective of the study is to conduct assessment on the Determinants of lease financing in the study area.

1.4.2. Specific objectives

- To examine Demand side (SME) factors that determine of lease financing in the study area.
- To assess Supply side (DBE) factors that determine lease financing in the study area.
- To assess potential challenges and opportunities of lease financing in the study area.

1.5. Significance of the study

The result of the study will have a great importance for different parties as lease financing is a new phenomenon in Ethiopia. Therefore the study expected to provide a better ground for DBE especially Jimma Branch, Stakeholders in the process of financing SMES, potential leasing investors, policy makers, practitioners, and lessee firms. And it will indicate the market potential for stakeholders which have interest to engage in leasing business. The study also helps for a researcher as standing point who needs to undergo further research on the sector. The study will be expected to solve some problems of the leasing sector practice and existing gaps. More or less the study will contribute to increase the general awareness of lease and the development of the industry based on some recommendation and finding.

The directors, managers and lease financing officers who are charged with duty to provide lease financing service on the bank and branch level as well. From the findings of the study, it's hoped that they will be guided and better be informed to overcome those impediments identified with lease financing service. So that internal problems will be solved and the external factors are also overcame in collaboration with stakeholders.

1.6. Scope and limitation of the study

These study address that the demand side and the supply side factor affecting access to lease financing service in case of Jimma zone and using factors such as Effective lending rate, Transaction cost, Firm Age, Firm Size, Industry, Management, Infrastructure and Bank lease finance requirement as independent variables.

The population scope consist Development Bank of Ethiopia Jimma branch and also SME found under Jimma zone.

In conducting this study, the limitations that were experienced includes the unwillingness of respondents to provide accurate information, the inability to schedule appointments with the top managers, the quality of information collected, confidentiality especially on financials and interviewer errors.

1.7. Organization of the Thesis

This study mainly focuses on analyze the determinant of lease financing service in case of Jimma zone, and Organized into five chapters. Chapter One introduces the research subject and briefly outlines the research background, Statements of the research problem, Research question, Research objectives, and also, Scope and Limitation have been clearly described. Apart from this, it also identifies the significance of the study. Chapter two consist the general review of the literature by including both theoretical and empirical literatures which related constraints in lease financing. Chapter three highlights the methodology of the study (Research Design, Description of the study area, Sampling Techniques, Sample Design, Population and Sample size, Data Collection & Methods of Data Analysis), chapter four presents' findings, discussion and analysis of the study. Finally, conclusions and recommendations of the study have been presented in the fifth chapter of the paper.

CHAPTER TWO

2. Literature Review

2.1. Introduction

This section presents the review of related literature in the area of lease financing. Which is broadly categorized in to theoretical and empirical literature review and under those category it contains Definition of lease financing, the concepts/principles & evolution and approaches to leasing, Leasing industry in Ethiopia, Lease finance in case of DBE, prospects and determinants of lease finance as well hypothesis developed for lease finance based on evidences from theories and literature review and also conceptual framework.

2.2. Theoretical Literature Review

The Lease financing gap of SMEs has been a point of discussion in the literature for some time now. Some studies focused on SMEs difficulties in accessing finance often called demand side characterization of the problem while others presented the main issues in bank lending practices called supply side characterization. Understanding SMEs problem of access to finance (or financing gap) implies describing the various limitations in both the demand side and supply side. The supply side constraints focus on the source of finance, i.e., if appropriate sources of finance are not available on terms and conditions suitable to SMEs (European Commission, 2001). Whereas, the demand side constraints explain if entrepreneurs or firms do not make use of existing financing opportunities due to shortage of good project, lack of persuasive business plans or the legal status of the firms.

This section presents the review of related literature in the area of leasing. It focuses on the concepts/principles, evolution and approaches to leasing as well as the supply side and demand side constraints.

2.2.1. Definition of Leasing

Brealey and Myers (2003) define a lease as a rental agreement that extends for a year or more and involves a series of fixed payments. More formally, leasing is a contract between two parties, where the party that owns an asset (the lessor) lets the other party (the lessee) use the asset for a predetermined time in exchange of periodic payments. In leasing, as in the case of simple rentals, legal ownership and use of an asset are separated. A lease is an agreement that allows one party to use another's property for a stated period of time in exchange for

consideration. Leases are an alternative method used by businesses and consumers to finance the acquisition of fixed assets.

A lease agreement involves at least two parties: a lessor (such as a bank), who owns the property, and a lessee, who uses the property. The lessor, essentially a creditor in the transaction, is repaid from a combination of lease or rental payments, tax benefits, and proceeds from the sale or release of the property at the end of the lease term (Comptroller Handbook, 2014).

Leasing is a legal document outlining the terms under which one party agrees to rent property from another party. A lease guarantees the lessees (the renter) use of an asset and guarantees the lessor (the property owner) regular payments from the lessee for a specified number of months or years. Both the lessee and the lessor must uphold the terms of the contract for the lease to remain valid (IFRS, 2015).

Leasing in its simplest form is a means of delivering finance, with leasing broadly defined as "a contract between two parties where one party (the lessor) provides an asset for usage to another party (the lessee) for a specified period of time, in return for specified payments." Leasing, in effect, separates the legal ownership of an asset from the economic use of that asset (IFC, 2009).

International Finance Corporation (IFC), 2009 further elaborated the definition that leasing is a medium-term financial instrument for the procurement of machinery, equipment, vehicles, and/or properties. In this sense, it can be argued that leasing has become a source of financing for medium-term investments able to support the development of various sectors of the national economy at competitive financing costs. Leasing provides financing of assets - equipment, vehicles - rather than direct capital. Leasing institutions (lessors) includes banks, leasing companies, insurance companies, equipment producers or suppliers, and non-bank financial institutions - purchase the equipment, usually as selected by the lessee, providing the equipment for a set period of time to businesses.

The accounting definition of a lease as provided by International Financial Reporting Standards is "an agreement whereby the lessor conveys to the lessee the right to use an asset for an agreed period of time in return for a payment or series of payments." IFRS rules are applied to the substance of the agreement rather than their legal form. In other words, IFRS emphasizes the economics of the transaction, its substance, over the legal form of the transaction.

2.2.2. Working definition of lease finance

In Ethiopia, according to the Capital Goods Leasing Proclamation No. 103/1998, leasing means a financing in kind for production and service purpose by which a lessor provides lessee with the

use of specified capital goods on financial or operating lease or hire-purchase agreement basis, without requirement of collateral, for a specified period of time and collects in turn a certain amount of installment in periodical payments over the specified period.

The proclamation No. 103/98 defines "Lessor" as a person who, under a lease agreement, provides to a lessee the right to use the capital goods in return for rent for an agreed period of time; and "lessee" as a person, under a lease agreement, obtains capital goods from a lessor and has the right to use the capital goods, as against payment of rent for an agreed period of time.

2.2.3. Leasing: Concept and Evolution

Leasing can be traced back 5,000 years to ancient Greece and the Middle East, where it was used in agricultural transactions. The mechanization of agriculture and the Industrial Age brought further specialization to leasing (Bass and Henderson 2000). Leasing was known in ancient Babylon in 2000 BC. Including leasing practice in economic relations took place in the year 1877, when telephone company 'Bell' decided not to sell the telephone appliances made by them, but to lease them. The lease of asset started in the USA and in Europe to business and industry development since World War II. After World War II, the victorious allies decided to create a new international system to promote world trade and prosperity, which resulted in the establishment of two new international financial institutions, the International Monetary Fund (IMF) and the World Bank, and also the General Agreement on Tariffs and Trade (GATT) whose successor organization was the World Trade Organization (WTO) (Mishkin 2005). At present thousands of businesses which are long on ideas and short on cash is using leasing as a simple and flexible financing solution to increase productivity and generate profits.

The global leasing performance as indicated in World Leasing Year Book (2014) reported that annual leasing volume in 2013 was USD 868 Billion. According to this report, four countries (US, China, Germany and Japan) represented 60% of world leasing volume. The White Clarke Global Leasing Report (2012) also indicated that US is the dominant player in the leasing industry with more than 30% of the world market. The total equipment-leasing industry in the United States is reported by ELFA as \$650 Billion, which is about 5.9% of 2008 real GDP (Schroth, 2010). On the other hand, the African leasing industry is still in its infancy as the region represents around 1% of world leasing volume in 2012 (*The White Clarke Global leasing report*, 2013).

Yet, enterprises through the world use leasing to finance vehicles, machinery and equipment. According to ILO (2003), in developed (OECD) countries up to one third of private investment

is financed this way, through leasing. Leasing in developing countries took off slowly at first, but during the 1990s the leasing industry in these countries saw spectacular growth, mostly through leases to large and medium enterprises. This growth can to a large extent be attributed to improvements in the legal and regulatory environment for leasing (ILO, 2003). Aloysius and Lubinda (2013) also argued that the remarkable growth of leasing industries in some African countries has been because of a varied number of interventions among which leasing legislative reform is one that contributed to the expansion process of the leasing industry.

With the Global Economic Crisis firmly behind us, the leasing industry has demonstrated its resilience and its ability to innovate—riding out further turbulence, growing in volume and controlling risk. The top 50 countries in 2017 reported growth in new business volume of 16.6%, rising from US\$1,099.77bn in 2016 to a remarkable US\$1,282.73bn in 2017. Three regions, North America, Europe and Asia, account for more than 95% of world volume. New business volume exceeded the previous year's global total by US\$182.96bn. The Asian region experienced truly exceptional growth of 58.9% largely bolstered by uplift in new business of US\$59bn in China. Europe recorded a growth rate of 32.7% and North America experienced 9.3% growth over the previous year. Australia/New Zealand was up 1% and South America up 23.2%. By contrast, Africa recorded a fall from last year's figure of 15.8%. Of total equipment-leasing industry in the world on 31 December 2017 Asia, Europe, North America ,Australia, South America and Africa accounts 2.7%,33.4%,34.8%,2.5%,1.3% and 0.4% Respectively. (White Clarke Global leasing report, 2017).

The African leasing industry is still in its infancy and, apart from Africa accounts for 0.4% of the global leasing market with only four countries being placed in the top 50 ranking. They are: South Africa ranked 28th, Morocco 37th, Nigeria 44th and Egypt 46th. The region declined in volume to US\$5.4bn., there is a paucity of quantitative information available. [Online]. Available: www.whiteclarkegroup.com: Identifying the top 50.

2.2.4. Approaches to Leasing Modalities

In many countries, leasing is a common mechanism to finance use and purchase of equipment, motor vehicles and real estate by firms. Analogous to other forms of asset-based financing, underwriting depends on the value of an underlying asset and on the ability of the firm to generate sufficient cash flow from business operations to meet regular payments rather than on its overall creditworthiness as assessed though financial statements, credit history and fixed assets. Typically knowledge about results of business operations is used by the financier to generate indicators of the adequacy of prospective cash flows (Gallardo, 1997).

Leasing agreements are distributed through different channels including bank networks, leasing companies, vendors and dealers of equipment. In many countries, the most popular channel for accessing lease contracts is at the point of sale of the asset, or through the vendor channel (Oxford Economics, 2011). In most developed lease markets, there are three distinct types of companies sponsoring or offering leasing facilities, namely (IFC, 2009):

- 1. Bank offering leasing as a product
- 2. Bank-owned leasing company
- 3. Nonbank-owned leasing company

Types of lease

The value of rental as well as risk assessment in lease contract is influenced by the type of lease agreement. Lease authorities share opinion as to the two types of lease; Finance lease and Operating lease-Wright (2004) and Ndu (2004)

The differences between these lease types are reflected in:

- ➤ The accounting treatment of the transaction
- > Legal right of the lessors and the lessees
- > Price of rentals

However some authors classified in to 3 main types of leasing: —operational leasel, finance leasel, and —hire purchasel lease. They generally vary in ownership rights and control of asset rights as well as responsibility for maintenance, damage and insurance. Leasing serves generally all sectors and can be applied for different size equipment.

1. Finance lease:

This is also referred to as capital or full pay out lease. Under a financial lease the customer carries the risks and rewards of the asset's ownership although the lessor remains the legal owner of the asset throughout the contract. In other terms the lessee benefits from the economic life of an asset in a similar way to a legal owner and takes on related risks, such as maintenance and insurance responsibilities. This includes contracts where the length of the lease is close to the useful economic life of the asset, as well as contracts where the lessee has the possibility to become the owner of the asset at the end of the lease, automatically or purchasing the asset for a specified nominal amount (Oxford Economics, 2011). Typically, financial leases are used by firms to finance long-lived assets, instead of resorting to long-term borrowing for acquiring these assets (Clarke, 1996). FAS 13 (as cited in Ross et. al., 2003) states that a lease must be classified as a capital one if at least one of the following four criteria is met:

- I. The present value of the lease payments is at least 90 percent of the fair market value of the asset at the start of the lease.
- II. The lease transfers ownership of the property to the lessee by the end of the term
- III. The lease term is 75 percent or more of the estimated economic life of the asset.
- IV. The lessee can purchase the asset at a price below fair market value when the lease expires. This is frequently called a bargain-purchase-price option.

2. Operating lease

An operating lease is typically of a shorter duration than the useful economic life of the asset and the customer has no possibility to purchase it at the end of the contact, or can acquire at a higher price than under a finance lease. An operating lease is thus essentially a rental contract for the temporary use of an asset (Oxford Economics, 2011; Kraemer-Eis and Lang, 2012)

3. Hire purchase lease

A —hire-purchase, which is similar to a finance lease, is a way to finance the purchase of equipment. But, part of the ownership is transferred with each payment. Up on payment of the last installment, the lessee becomes the full owner. However, hire-purchase is a type of installment purchase, with a well-defined purchase option for the customer, who agrees to pay the cost of the asset over time, including principal amount and interest for the period the asset is used (ILO (2003).

Table 2.1: Main Types of Leasing

Feature	Operating Lease	Finance Lease	Finance Lease
Ownership	Lessee does not own the equipment; Equipment is returned at the end of Rental period.	Ownership remains at lessor until the end of Lease period, when lessee has an option to buy.	Lessee ownership increases through the lease period with eventual ownership; similar to a mortgage system.
Payment	Lessee makes regular rental payment; Does not pay the full value of the equipment over the rental period	Lessee makes regular fixed payment over an agreed period, paying nearly the full cost of the asset Plus charges over the period of the lease	Lessee makes payments that increase ownership rights until the payments are complete
Service, Repair, maintenance damage, and Insurance	Responsibility of Lessor.	Responsibility of Lessee all risks usually associated with ownership, although Lessee does not own.	Responsibility of Lessee all risks usually associated with ownership although Lessee does not own.
Key Benefits	Enhanced cash flow with lower payments	Same as operating lease; with option to own at end of lease period.	Same as operating lease; gradual ownership

Adapted from: HelenTedla(2014)

2.3. Leasing industry in Ethiopia

In Ethiopia, owing to the need to accelerate the growth and development of SMEs by facilitating access to finance and availing working equipments and machineries to enterprises, the government enacted the first leasing law in 1998, Capital Goods Leasing Business Proclamation No. 103/98. This proclamation was issued to address the equipments and machinery needs of enterprises through lease financing services. Moreover, the service was originally thought to be delivered by lease companies that will be licensed and supervised by the former Ministry of Trade and Industry. Unfortunately, since then no entity was established, at least legally, approved to engage in lease financing business, despite various interests from local and international investors to engage in this business including IFC's proposed "Access Leasing Project" initiatives to establish the first leasing company in the country in 2010 (World Bank, 2012). This situation calls for the need to amend the existing Capital Goods Leasing business proclamation No. 103/98 and authorize appropriate government body that facilitates the licensing and supervision of the lease companies.

To this effect, recently the government has taken measures to address the gap through issuance of revised leasing legislation in 2013, capital goods leasing business (amendment) proclamation No. 807/2013. This proclamation has shown clear demarcation of authority between the Ministry of Trade and the National Bank of Ethiopia meticulously. As a result, the National Bank of Ethiopia (regulatory body of financial institutions) is given the mandate of licensing, regulating and supervising the business of capital goods finance companies which includes financial lease and hire-purchase; and the Ministry of Trade is mandated to license and supervise the Business of operating lease.

The lease industry is undeveloped and a recent phenomenon in Ethiopia. Five government initiated regional leasing companies have been established to begin leasing operations for the first time in Ethiopia. The 5MFI-affiliated and government supported leasing companies have received their licenses, and are setting up their operations. The five leasing companies, namely:

Addis CGFC, Oromia CGFC, Waliya CGFC, Debub CGFC and Kaza CGFC, obtained capital goods finance business license in 2014 and currently operating in Addis Ababa, Oromia, Amhara, SNNR, and Tigray regions, respectively. The major shareholders of these leasing companies are regional governments and the five big MFIs in the country. Addis Capital Goods Finance SC, established with a capital of 955 million Br, launched its services on Tuesday, June 10, 2014. They are providing machinery to Addis Ababa based medium manufacturing enterprises on a lease and

loan purchase basis, without the need for collaterals. It was established with a financial contribution of 455 million Br from eight state entities, including Anbessa City Bus, Addis Ababa Abattoirs Enterprise, Addis Ababa Exhibition & Market Development Centre, Addis Saving and Credit SC, theatres and cinemas, as well as the Addis Ababa City Administration. They have also received a long term loan of 500 million Br from the Commercial Bank of Ethiopia (CBE). The other four leasing companies are mainly owned by regional governments and big MFIs and they get a loan from commercial bank of Ethiopia. Besides these five leases providing companies Development bank of Ethiopia provide lease financing beyond the limit of 1 million.

2.3.1. Lease Financing in case of Development Bank of Ethiopia

DBE is expected to play a key role in management of the proposed credit facility, both as a wholesaler (lending to other financial institutions for on-lending to SMEs), and as a retailer (direct support to SMEs). In retail leasing, DBE plans to provide lease finance to SMEs for contracts greater than ETB 1 million through its regional branches. DBE started with one head office, five regional offices and 32 branches in 2015 and has opened 75 additional branches since then. According to the new Leasing Finance Policy for SMEs, DBE regional offices can appraise and authorize SME lease financing from ETB 1 million to ETB 30 million(world bank).

The sectors likely to benefit from capital goods financing of Development Bank of Ethiopia (DBE) are enterprises producing goods and services for export and import substituting enterprises as well enterprises opportunities. as capable of creating large employment It provides lease finance for machineries and equipment to the priority areas such as: Priority area projects for SMEs are: Agro-processing industries, Manufacturing industries, Tour industries, Construction industries and Mining and quarries. So that, enterprises engaged in business activity such as , Dairy products processing, Animal feed processing; Poultry products processing, Fish products processing, Edible oil extraction and processing, Fruit and vegetable processing, Food processing, Leather and leather products, Textile (spinning, weaving, dying, knitting, garment, in combination or separately), Metal and non metallic works, Wood works, Handicrafts, Soap and detergent, Jwellery, Paint, for Tour industries; Boat service, Car service and for Construction industries enterprises engaged in Hallow block, pipe and bricks production, Concrete pole production, Bazola production, Terrazzo production, Ceramic Production, Gypsum production, Construction materials production; and for Mining and quarries industries enterprises engaged in Marble production, Gold and precious minerals production, Gravel production and Agricultural

mechanization are eligible for development bank of Ethiopian Lease financing service.(DBE, Procedure Manual for Lease Financing; January, 2016.

Accordingly, all operators and supervisors are earnestly advised not only to familiarize themselves but also to comply with and adhere to the requirements and conditions set by concerned organs together with the vital policies and procedures in the Manual so as to set the pace for the realization of the Bank's objectives.

Lease Financing Policy is issued on January, 2016 by Board of Management of the Bank based on the duties and authorities vested in it by Public Enterprise Proclamation No. 25 of 1992 and the Public Financial Enterprise Agency Council of Ministers Regulation No. 98/2004.

2.3.2. Definition of Small and Medium Enterprise

In accordance with the Government Micro and Small Enterprise Development Strategy, January 2011 classification:

- I. "Micro Enterprise" under the industry sector is defined as an enterprise operates with not more than 5 employees including the owner and its family and its total asset is not exceeding Birr 100,000 excluding the value of land and building;
- II. "Small Enterprise" under the industry sector is defined as an enterprise operates with between 6 and 30 employees including the owner and its family; and its total assets worth between Birr 100,001 and Birr 1.5 million excluding the value of land and building;
- III. "Medium Enterprise" under the industry sector is defined as an enterprise operates with above 31 employees and its total assets worth above Birr 1.5 million excluding the value of land and building.

In the context of DBE, Small and Medium Enterprises (SMEs) shall mean an enterprise in the Agro-processing industries, Manufacturing industries, Tour industries, Construction industries and Mining and quarries that operates with above 6 employees and has total capital from Birr 500,000 to Birr 7.5 million.(DBE, lease procedural manual)

2.3.3. Eligibility Criteria and Requirement for Lease Financing

Development bank of Ethiopia lease financing procedural manual thought that, the applicant must contribute 20% of the total machinery and operational costs as a form of working capital;

The total capital of the project should be within the range of Birr 500,000 to Birr 7.5 million(The Bank shall not provide lease financing service to micro and small enterprise whose total capital is less than birr 500,000).

The Bank shall finance new capital goods from the priority areas of the Government for SMEs only for the purchase of capital goods for their projects use. Priority area projects for SMEs are:

Agro-processing industries, Manufacturing industries, Tour industries, Construction industries, Mining & quarries and Agricultural Mechanization.

The lessee should submit a business plan for requests up to birr 10 million and feasibility study for requests of more than Birr 10 million in order to demonstrate his/her knowledge and understanding in the area of the targeted project. The business plan shall be prepared by the lessee.

The lessee in lease financing should have to have those allowed manufacturing premises from the following source. Either of Government owned rented premises, Private owned rented premises and Personal (family) owned premises.

The total liabilities to a single lessee resulting from extension of one or more SMEs lease financing shall be limited to Birr 30 million. All financing to SMEs shall only be in the form of equipment.

The minimum amount to a single lessee resulting from extension of one or more SMEs lease financing shall not be less than Birr 1 million. (DBE, Lease financing Policy).

2.3.4. Graduated SME in context of DBE

Graduated SMEs are those SME who has graduated from micro enterprises to small enterprise and have a paid up capital of in between 500000 to 7.5 million.

2.4. Prospects of lease financing

Leasing in Ethiopia has enormous potential. Provided an enabling environment for leasing is present, Ethiopia has good economic growth prospects and is a large market, with its population of nearly 90 million, and approximately 80% engaged in agriculture. IFC's leasing support analysis points to agricultural equipment such as tractors, irrigation equipment, basic food processing and drying equipment having the greatest potential for entry in leasing. Currently, access to finance is one of the biggest challenges in the country. Thus, leasing as an alternative to lending would be an attractive option primarily due to the leasable asset serving as collateral, and equipment that would have been out of reach, becoming possible to obtain (Helen, 2014).

Work is ongoing by NBE and IFC to address and close the gaps and challenges in the leasing sector. Even the current scarcity of leasing professionals'/skill sets could improving the medium-to

long-term, as concerted efforts are made to make available extensive and widely available training and capacity building by NBE. The private leasing companies also plan to address the skills set gaps in the sector by drawing expatriates to train their local staff (Helen, 2014).

2.5. Determinants of lease financing service

Lease financing gap to SMEs in Ethiopia can be attributed by both the demand side and supply side. The demand side has to do more on the characteristics of enterprises that limit their ability to fulfill the criteria for bank loans leading to financial limitations. The supply side could be more related to the banking sector requirements and the perceived risks by banks to finance SMEs with lease financing service of the bank.

The growth of a firm is, to a certain extent, a matter of decisions made by individual operators. This is very much pronounced for SMEs that are run by owner-managers. Previous studies indicate that motivation, individual competencies and personal background are important factors for the success of micro and small enterprises (Baum et al., 2001; Shane et al., 2003).

2.5.1. Management

Zeleke (2009) conducted a study on the efficiency of management as a determinant of long-term survival in micro, small and medium enterprises in Ethiopia, and his research ascertains that high level of managerial skills significantly promotes long-term survival and profitability in small businesses and enterprises. Successful businesses are significantly associated with the ability to generate profit on a sustainable basis. Profitability has enabled successful businesses to achieve their next level of growth as well as the potential to stay competitive in business.

Owner's and manager's characteristics affect SMEs ability to access lease finance especially from formal financial institutions. The entrepreneurs' behavior has profound consequences on how the business is run. Schmitz (1982) highlighted that the small scale producers in developing countries fail to expand primarily because they lack managerial ability. For this reason, entrepreneur related factors take a priority position in all credit assessments by the borrowers. Kumar and Fransico (2005), found a strong education effect in explaining access to financial services in Brazil. In a study conducted on UK SMEs, Irwin and Scott (2009) observed that graduates entrepreneurs had the least difficulties in raising finance from banks. Similarly, using data from SSA, Aterido, et al. (2013) found that the level of education of the owner is positively related with access to formal banking services. Owners with higher education are more likely to use and have access to formal loans.

2.5.2. Infrastructure

Good infrastructure facilitates have a positive effect in reducing the cost of operation. MSEs Owners in Ethiopia indicated that lack of efficient, reliable, safe and affordable infrastructure is affecting the performance of their business. The physical infrastructure facilities are not adequately developed and expanded in Ethiopia to meet the growing demand of MSEs activities. As a result, most MSEs have problems related to business premises such as an increase in house rent, lack of basic services such as telephone lines, electricity supply, sewerage and water services (Eshetu & Mammon, 2009). According to Commission on Legal Empowerment of the Poor (2006), though not directly linked, inadequacy of infrastructure (road, banking service, electricity, telecommunication and other services in facilitating smooth operation of private investment are serious impediments. Rahel & Paul (2010) also identify that even if access to infrastructure is not reported as a significant problem, lack of access to water and lack of awareness about the advantages of telephones and media leads to a negative or insignificant effect on the growth of enterprises. According to the findings of the same research most MSEs have an easy access to transportation. But, the number of enterprises that has access to the rest of the infrastructures such as telephone, television, radio and water are limited.

2.5.3. Firm Level characteristics

Firm level characteristics such as age, size, location, industry, financial institutions policies and procedures towards SME lease financing and organizational structure are key determinants in accessing lease financing service of the bank. In terms of size, banks tend to issue more credit to large firms as compared to smaller firms. In China, Honhyan (2009) found that the investment portfolios of larger firms were more diversified, which lessen the probability of failure and makes banks more confident to issue loans based on their expertise and large assets structures. Furthermore, Cassar (2004) found a positive correlation between the size and banks' willingness to provide credits. Aryeetey et al. (1994) in Ghana observed that large firms were more favored by banks than small and medium-scale firms in terms of loan processing.

Additionally, young ventures at start-up levels may not have the level of expertise and success history required. Klapper et al. (2010) found that young firms (less than four years) rely more on internal financing than bank financing. Similarly, Woldie, et al. (2012) in Tanzania observed that firms at start-ups and less than five years depended more on informal financing sources. Using data from African countries, Beck and Cull (2014) showed that older firms are more likely to have a formal loan than their younger counterparts. It is generally expensive and difficult for new firms to

acquire bank financing, mainly due to the information asymmetry problem and high collateral requirements (Ngoc et al. 2009).

Sharpe and Nguyen (1995) argue that the quality of information on a company's performance and future prospects is negatively related to firm size. As a result, the asymmetric information problems will exacerbate as firm size decreases. This is in line with Grinblatt and Titman (1998) who argue that the conflict between firm and debt holders may be worse for small firms. Small companies are usually more flexible and thus better able to increase the risk of their investment projects. In such a situation, lenders might be reluctant to provide debt finance to small firms, because the potential return from firm operations, especially from those of risky investment projects accrues to shareholders only, while the increased risk is shared by debt-providers (Beattie et al., 2000). Additionally, although lenders provide funds to small firms, the high information cost premiums and debt level will enhance the small firms' probability of bankruptcy as well as managers' personal risk. Both arguments suggest that small firms should have lower debt levels.

Nevertheless, firm size might have a differential influence on leasing relative to debt type finance (Beattie et al., 2000). Grinblatt and Titman (1998) suggest that small firms have a higher tendency to use more leases rather than debt, since leasing can reduce personal and asset-specific risks as well as the other costs generated from information asymmetry. Empirical evidence supporting this prediction is also reported by Graham et al. (1998), Eisfeldt and Rampini (2009), Callimaci et al. (2011), and Cosci et al. (2015) in their studies of leasing determinants among USA, Canadian, and European-based firms, respectively. However, Lasfer and Levis (1998), Deloof and Verschueren (1999), and Mehran et al. (1999) find a significant positive relationship between leasing and size. Given the mixed results in the empirical literature, we do not predict the sign of coefficient on firm size in Chinese SMEs. Following Sharpe and Nguyen (1995) and Mehran et al. (1999), a natural logarithm of sales is used to measure firm size in this study. Here, sales rather than total assets are used to avoid potential endogeneity (Sharpe and Nguyen, 1995).

2.5.4. Transaction costs

The financing constraint theory of Evans and Jovanovic (1989) describes transaction costs as including time, service fees, transportation expenses, communication, and opportunity costs, which increase the cost of finance to the borrower. They illustrate that when such costs are high on the borrower's side, access to debt finance becomes low. This is based on the notion that borrowers are assumed to be financially constrained by the time they choose to seek finance, therefore excessive costs incurred before the money is issued usually scare off would be borrowers, thus causing them

to withdraw from applying for such finance. In addition, the transaction cost theory proposed by Liedholm (1985) and North (1992) can be considered as the basic theoretical link between the service provider and the customer (financier and borrower). It does not differ much from the financing constraint theory of Evans and Jovanovic (1989), although it goes further by explaining the coordination of economic activities, which creates transaction costs (for example time, service fees, transport, meetings and opportunity costs). Liedholm (1985) and North (1992) also advise borrowers to always reveal all information about the firm to the lender so that it can reduce the cost and time of trying to discover such information from external sources when assessing loan applicants.

Transactions costs are described as high for SMEs by Beck (2007) for three main reasons: first, SMEs tend to borrow small amounts, although irrespective of the loan size, assessing a loan request entails costs that must be incurred by the borrower; with large amounts the burden is lessened. Second, due to information asymmetry, which increases monitoring costs, failure by the financier to monitor the borrower's activities leads to moral hazard. Third, the geographical location of SMEs in terms of distance in kilometers from the financiers, for example banks. In the context of Uganda, a study conducted by BOU (2009) on the extent of access to credit among agricultural firms found that the majority (90%) of SMEs could not access formal finance due to the transaction costs associated with bank finance. The explanations for this huge access to debt finance failure is that the majority of Ugandan SMEs are agricultural based and are known to incur huge transport and monitoring costs due to their location in remote areas. This isolation increases the transaction costs of loan administration on the part of the credit supplier, who needs to make frequent movements back and forth to the remote area throughout the loan application and repayment period.

Moreover, such SMEs are hard to monitor due to the distance and in cases of default, if the collateral against the loan is located in a remote area, its value is usually less and it is hard to sell to obtain cash quickly. Therefore, with such barriers, financiers tend not to priorities SMEs located in rural areas because it becomes excessively expensive for them to meet transaction costs. Additionally, the majority of SMEs do not use computerized systems to provide financial reports because even electricity is not a priority, let alone computers, which means that if entrepreneurs need bank finance, they have to incur extra costs to hire an auditor and accountant to prepare the accounts. In most cases, the entrepreneur does not have that kind of money, which consequently hinders access to debt finance. Studies conducted elsewhere, for example by Beck and Demirguc-Kunt (2006), Claessens et al. (2006) and Demirguc-Kunt et al. (2004) have revealed that high fixed costs can trap small scale financiers at a low equilibrium level because smaller credit transactions

are associated with higher transaction costs, which implies a financing constraint. Overall, transaction costs can constitute an important limitation of outreach in the provision of finance, especially to SMEs, because of the opaqueness that increases assessment and monitoring costs (Berger and Udell, 2006).

Beck and Torre (2006) argue that higher transaction costs increase the likelihood that borrowers will withhold loan applications, especially if the costs are to be incurred before the loan is finally issued. In addition, high transaction costs tend to increase default risk because of the massive initial expense that individuals have to cover from the pool of borrowed funds, which causes a deficit and moral hazard on the original intentions of the loan. Beck and Torre add that high transaction costs not only increase the cost of borrowing, but can also restrict access to external finance, especially for SMEs.

2.5.5. Industry

The concentration of industry varies from country to country due to the different levels of economic development (World Bank, 2014). Desire for external finance and average debt ratios differ from industry to industry because of factors such as asset risk, asset type, and need for external funds (Myers, 1984). Miller and Modigliani (1961) explain why the industry orientation of a firm matters when it comes to the acquisition of external resources. In their opinion, industry is a proxy for the target capital structure of the firm, in the sense that its activities will determine the demand for credit, either for transactional motives, or for speculative or precautionary purposes. Moreover, Maksimovic and Phillips (1998) argue that the industry orientation of a firm is a key factor in asset redeployment. For example, in the case of firms such as accountants and solicitors, they rarely hold much capital in the form of physical assets, unlike manufacturing firms, which own a considerable amount in the form of plant, machinery and equipment. Therefore, the rate at which industry variation will influence access to lease finance will depend on the nature of the industry, the type of finance and the motive for the demand for credit. Due to the scarcity of resources, firms in the same industry are faced with the tendency of industrial average pressure, especially industries that are concentrated in the same line of production, which causes unprofitable firms in the same industry to end up with a relatively high debt ratio by trying to compete with their counterparts (Myers and Majlu, 1977).

According to Nangoli et al. (2013), formal financiers tend to favor industries based in the manufacturing sector. This is because, in Uganda, although the country is agro-based, most of the agricultural products, which contribute about 80 per cent of total exports, are exported in a finished

or semi-finished form. The most important export is coffee, at 22 per cent of total exports, followed by tea, cotton, copper, oil and fish. Uganda's main export partners are Sudan (15 per cent), Kenya (10 per cent), DR Congo, Netherlands, Germany, South Africa and UAE (UIA, 2014). Therefore, this justifies why manufacturing firms are known to receive most of the credit they apply for, compared to service industries, because as the country is a developing economy, there is little activity in the service sector (BOU, 2014b). Industries, for example manufacturing or services, tend to have different characteristics from each other, therefore the demand for external finance also differs. Consistent with static trade-off theory (Myers, 1984; Miller, 1977; Porter, 1980), firms in each industry will choose the optimal capital structure in which there is equality between the benefit attained from capital and the financial distress cost.

It is commonly hypothesised that manufacturing firms tend to receive credit from financiers mainly because they have visible stock to display that can be converted into cash, unlike service firms (Porter, 1980; Rumelt, 1991). Among service enterprises in the USA, McGahan and Porter (1997) conducted a study and established that industry had direct and indirect influences on the access to external resources. In terms of access to debt finance, they found that industrial effects were significant in determining whether enterprises would be able to access finance or not. This is due to the fact that industry controls the market share of the firm, profitability and the resources it may attain from external financiers. For example, it was established that industry effects account for a smaller portion of access to debt finance variance in manufacturing, but a larger one in the service sector, which offers facilities such as lodging/entertainment services, wholesale/retail trade, and transportation. McGahan and Porter (1997) reported a negative relationship between manufacturing firms and access to external resources, whilst it was positive for service firms.

However, Goyal et al. (2002), in their examination of the US defence weapon manufacturing industry during the 1980-1995 periods, found that it received most of the external finance it applied for from banks. This is because defense in the USA is a priority and enterprises manufacturing weapons can obtain finance easily. Likewise, in Uganda, Nanyondo et al. (2014) found that manufacturing firms were more likely to obtain finance than service firms. This is because manufacturing industries have collateral to offer to banks as security in the case of default. These mixed findings call for further investigation into the relationship between industry and access to debt finance among SMEs in Uganda.

2.5.6. Effective lending rate

The effective lending rate is measured as an affordability barrier that determines the cost of finance, and is possibly even more important than physical access barriers (IFC, 2014). The rate is defined as the interest rate plus a premium over and above it (ECB, 2013). It is classified by Arora (2014) as a price barrier to accessing finance, especially among SMEs. Lending rates are theorised to have a negative relationship with money demand by Keynes' monetary theory of interest (1923, 2005) and Fisher, 1930). Keynes and Fisher contend that the cost of finance largely depends on the motive behind the demand for credit; for example, to take care of daily transactions, for precautionary purposes or for speculative reasons. Conditional on the motive for the demand for credit, effective lending rates vary for many reasons; for example, risk associated with the loan; the nature of security against the loan; services in addition to the loan itself; lack of free competition among lenders or borrowers; duration of the loan; and other grounds which most economists refer to as "economic friction". Keynes (1923) and Fisher (1930) postulate that excessive lending rates increase the borrower's burden in terms of loan repayment because demand for credit is sensitive to changes in these rates. For example, in situations when the lending rate fluctuates depending on inflationary tendencies, it is difficult for borrowers to cope with such adjustments in the repayment of the principal and interest, therefore in conditions of such uncertainty; they will withdraw their applications for external finance. With such an escalation in lending rates, external finance tends to be excessively expensive for SMEs. This is because it drains the business of retained earnings as the entrepreneur has a huge repayment bill to cover the principal and lending rate charges. Therefore, when the lending rate is high, desire for formal bank finance is low. Other international bodies, for example OECD (2014), show that high lending rates have a negative relationship with access to debt finance among SMEs. When the lending rate is high, SMEs will demand less external bank finance. In addition, in Nigeria Ololade and Olagunju (2013) found that the lending rate was negatively and significantly associated with access to bank finance among SMEs. The findings were based on perception responses that the effective lending rate is usually high and meant to safeguard against default risk caused by information asymmetry.

The study established that due to information asymmetry among SMEs, it is more likely that they will be overcharged because they are considered to be associated with high default risk,unlike larger firms in Nigeria. Similarly, Beck and Torre (2007) assert that the higher the anticipated default risk, the higher the effective lending rate, which negatively influences access to bank finance. They argue that lending rate disadvantages are prevalent among SMEs due to high default risk. Occasionally, financiers are faced with the challenge of selecting whom to give credit to and

how to adequately minimize risk. This is because lenders cannot differentiate between borrowers of diverse risk levels. Again, high lending rates lead to moral hazard and adverse selection, making the SME lending business more risky. There are variations in the theories about lending rate phenomena affecting money demand; the Keynes (1923) school of thought suggests that lending rates influence money demand, whilst Fisher (1930) contends that the power of relationship lending overrides the magnitude of lending rate effects on money demand. However, empirical evidence suggests that lending rates negatively influence access to debt finance (Odongo, 2014; Beck and Torre, 2007; Ololade and Olagunju, 2013).

2.5.7. Banks Requirements that makes SMEs eligible for Lease Finance

June 2017 and 2018 Annual reports of the DBE listed out a number of challenges and less performed plan against actual, off those challenges SME fail to fulfill Banks Requirement that makes SME eligible for Lease Finance.

Requirements such as; the lessee should contribute 20% of the total machinery and operational costs as a form of working capital, The total capital of the project should be within the range of Birr 500,000 to Birr 7.5 million (The Bank shall not provide lease financing service to micro and small enterprise whose total capital is less than birr 500,000), The lessee in lease financing should have to have those allowed manufacturing premises from the following source Either of Government owned rented premises, Private owned rented premises and Personal (family) owned premises and The minimum amount to a single lessee resulting from extension of one or more SMEs lease financing shall not be less than Birr 1 million.

2.6. Empirical review

For small firms leasing appears to play a vital role in providing financing, since leasing costs comprise 52% of their external financing expenses. Larger firms, on the other hand, cover a relatively smaller 32% of their external financing requirements with leasing. Notably, the average interest costs are 5.1% for small firms and 4.2% for larger SME in our sample. These descriptive figures are further corroborated by the results of a generalized method of moments estimation that higher interest costs, smaller firm size, strained liquidity and higher growth rates have a positive impact on leasing (Slotty, Constantin, 2009).

As empirical study indicates lease financing is at its infant stage of development in Ethiopia and has potential prospects for growth even it encounters so many challenges like law contradiction, there is no law that prohibit foreign investors, there is no mechanism of easy repossession of leased asset (particularly for hire-purchase product) without judicial process. Besides those and other challenges lease financing in Ethiopia has high market potential for growth. Leasing as an alternative source of financing has many benefits for SMEs in Ethiopia. It reduces the collateral requirement, one of the major challenges of SMEs to have access to finance, since the equipment itself serves as a security. The study done by Asfaw Abebe and the results of his finding indicates the major challenges of the lease finance sector in Ethiopia include: lack of availability of low cost and sustainable funding; lack of clarity on interpretation of tax incentives provided by law; lack of leasing expertise in the market; existence of inadequate supply chain linkages as well as procurement hurdles; existence of limited domestic suppliers; and absence of specialized leasing training center (Asfaw Abebe, 2016). Ethiopia leasing sector is at an infant stage, currently characterized by inadequate regulatory and legal framework and little know-how of leasing operation by potential key players and by NBE. Todate, renting of equipment is more common, typically in the construction sector. Leasing was limited to a few larger microfinance institutions that leased for example small irrigation equipment and beehives, typically to farmers with co-operatives co- signing. The slow development of the leasing sector to-date may be due to the uncertainty and lack of clarity surrounding permissible leasing modalities and the authority that mandates the activity in general. Leasing sector is recently experiencing positive developments. There is a growing interest by the government and NBE, as well as by private sector players, to integrate leasing as a crucial instrument to address the gap in access to finance and meet economic growth targets. An enabling environment for leasing typically requires appropriate laws and regulations, in terms of taxation, operation and ownership, as well as demand and supply of leasable assets, leasing operation knowledge by leasing companies, suppliers and potential lessees (Helen Tedla, 2014).

Contino (2004), assets that can currently be leased ranges from apartments, formal clothing, limousines, moving vans, appliances, automobiles, art to computers, cameras, furniture, stereos, as well as jewelry. The advantages of leasing involve cash conservations and preservation of the working capital in firms, says Yan (2002). Equipment leasing is advantageous in that it provides a better alternative source of capital as well as a flexible alternative to cash necessary for the acquisition of assets and equipment that are critical to business. Leasing also allows for the smaller or zero marginalized firms to transfer tax shields that are unusable to lessors that pay tax. In turn, they can get lower lease payments. On the other hand, it is argued that leasing is negatively linked to profitability over a period and again linked positively to asset growth. It is however not guaranteed that leases will be terminated before the completion of the original term, and thus the lessor will have to pay off the lease (Erickson, 2004). To this effect, Bierman (2005) claims that this can be a financial challenge for entrepreneurs whose businesses are experiencing a fall.

Dagnachew Nuguse(2019), This paper was aimed at assessing and identifying the challenges that Development Bank of Ethiopia faces in Small and Medium Enterprise lease financing. The factor of commencement of the study is the fact that the Small and Medium Enterprise play a vital role in development of our country and at the same time Small and Medium Enterprise lease financing is the new and infant mode of financing in the country as well as in the specific company which is Development Bank of Ethiopia. Due to this fact the bank was perceived to face challenges in financing Small and Medium Enterprises through lease. The population of the study was Development Bank of Ethiopia and Purposive sampling design has been used. Based on the result, the study has identified challenges that the bank faces as, the bank's Small and Medium Enterprise selection criteria, poor supply chain with absence of proper and sufficient suppliers of capital goods, macro-economic instability like inflation and currency fluctuation, poor quality of financial statements of Small and Medium Enterprises, lack of sufficient demand (absence of Small and Medium Enterprises), Lack of knowledge about Small and Medium Enterprise Lease financing, poor management of credit risk by the bank and lack of proper internal policy and procedures that minimizes the cost associated with Small and Medium Enterprise lease financing loans.

Befikadu Niguse, 2016 on its assessment of lease financing in Ethiopia among DBE, ACAGFC and OCGFC, identified major challenges that hinder lease financing. These includes: lack of leasing expertise in the market; existence of inadequate supply chain linkages as well as procurement hurdles; existence of limited domestic suppliers; and absence of specialized leasing training center,

lack of stakeholder integration, shortage of hard currencies and re-possession, absence of adequate local manufacturers, funding, lease processing time, awareness gap and rental problem. Related with this concept respondent' shows their agreement both in questionnaire and interview parts.

Ahmed et al. (2003) conducted a research entitled Leasing Industry in Pakistan: Problems and Prospects. The main objective of this paper was to identify the major issues adversely affecting the performance of leasing sector in particular and financial sector in general. Accordingly, the study tried to identify two general issues pertaining to macroeconomic scenario and four specific challenges of the leasing companies in Pakistan. Regarding the first two general issues the paper discusses in detail about the adverse effect of economic slowdown and volatility of interest rate on the activities of financial institutions including leasing companies. On the other, the four specific challenges explained in the paper include: resource constraints (funding problem), non-availability of level playing field, lack of innovative products and tax related challenges. It was also argued that in order to improve the near future demand prospects of the leasing sector in particular, the leasing companies need to develop innovative products along with encouraging leasing of plant and equipment relating to priority sectors of the economy including energy, IT (computers and other hardware), textiles, etc subject to their intrinsic value.

Alyosius and Lubinda (2013) in their study of the development of Leasing Industry in Zambia tried to assess the development and challenges of the same. The result of the study revealed that the prudential performance of the sector has been unsatisfactory. The study revealed that the industry performed average in capital adequacy, but performed poorly in asset quality, earnings and liquidity performance. It has also found out that the regulatory system in Zambia was still fragmented and operating in an environment with insufficient legislation. The study further revealed that the regulatory body had not yet put enough effort in promoting leasing markets in Zambia. The study noted that there is no leasing industry specific legislation in the country. The main regulator, Bank of Zambia, lacked technical and supervisory capacity to adequately supervise the industry. According to the study, the major challenges experienced by the lease providers in Zambia included the lack of leasing policy and leasing laws, lack of skilled staff, absence of resident leasing trainers and poor supply chain systems that exist in the country. On the other hand, the study didn't included key leasing stakeholders such as tax authority, investment agencies, and equipment suppliers to strengthen and validate the findings.

Brahmaiah (1992) carried out a research on the problems and prospects of leasing industry in India. The paper divides the sector into two broad categories: the private sector leasing and the public sector leasing. The important constituents of the private sector leasing industry include: Pure Leasing companies, Hire-purchase and Finance companies, and Subsidiaries of Manufacturing Group companies. On the other hand, the public sector leasing organizations are divided into (a) leasing divisions of financial institutions; (b) subsidiaries of nationalized commercial banks; and (c) other public sector leasing organizations. After thorough analysis of the leasing industry, the study has identified the main problems that require utmost attention. These are: resource crunch; inadequate tax benefits and sales tax burden; rigid procedure for import/cross-border leasing; lack of proper and integrated accounting standards; lack of legislation; existence of cut-throat competition; and lack of expertise in the management. With regards to the prospects of leasing industry in India, the paper noted that despite the abovementioned problems, the leasing business in India has its own growth potential and prospects. It has also described the potential of leasing in India by comparing the level of total industrial investment through leasing (less than 1 percent) with that of developed countries such as the US, the UK (30 – 40 percent capital investment through leasing) and 10 to 20 percent in Australia, Canada, Japan, etc.

According to previous studies several factors such as transaction cost, default rate, infrastructure and limited access to lease financing service have are mentioned as reasoning for credit constraints in Ethiopia. (Kertu ,2007) reports the lack of access and efficiency among the lenders to cause inflexible loans and not reaching the vulnerable (rural) residence.

Small and Medium Enterprises in Africa are less likely to take loans from financial institutions than in any other developing regions; but many of firm and country level covariates explaining access to finance remain the same inside and outside Africa (Beck and Cull, 2014). Bank loans devoted to SMEs in Africa average only 5.4 percent while in other developing countries it amounted around 13.1 percent. And bank lending to such enterprises are costly compared to other developing countries. A fee charged on SME loans in Africa is almost twice as high as in other developing economies (Martinez Peria, 2009).

whilst overall the majority of SMEs appear not to have difficulties obtaining lease finance, there is evidence to indicate that a number of groups and sectors do face distinct challenges in accessing finance (Deakins et al., 2008). The fundamental reasons behind SMEs credit demand can be found in their peculiar characteristics. Issues that involve factors such as inadequate flow of information, SMEs-bank relationships, business and entrepreneurial factors and legal status of the firms are often stated as major demand side constraints.

Owner's and manager's characteristics affect SMEs ability to access of lease finance especially from formal financial institutions. The entrepreneurs' behavior has profound consequences on how the business is run. Schmitz (1982) highlighted that the small scale producers in developing countries fail to expand primarily because they lack managerial ability. For this reason, entrepreneur related factors take a priority position in all credit assessments by the borrowers. Kumar and Fransico (2005), found a strong education effect in explaining access to lease financig services in Brazil. In a study conducted on UK SMEs, Irwin and Scott (2009) observed that graduates entrepreneurs had the least difficulties in raising finance from banks. Similarly, using data from SSA, Aterido, et al. (2013) found that the level of education of the owner is positively related with access to formal banking services. Owners with higher education are more likely to use and have access to formal loans.

Location of the enterprises also plays an important role in their creditworthiness level. Berger and Udell (2006) found that the geographical proximity of SMEs to their respective banks affect positively the banks' decision-making. It enables the loan officers to obtain better environmental information about the borrowing enterprises. Gilbert (2008) pointed out that urban firms have better chance in accessing credits from banks than those who are in rural areas or poor urban areas.

Abor and Biekpe (2007) found that the Ghanaian firms involved in agricultural or manufacturing sector have higher capital and asset structures than those operating in wholesale and retail sectors. Subsequently these assets can be used as potential collateral values for banks and encourage them to issue bank loans. However, the firms using rentable assets or having low assets structures, as is the case with service businesses, are subject to low financial access due to scarcity of collateral values.

For SMEs, lack of premise is unquestionably a serious problem. Most informal operators do not get access to suitable locations where they can get easy access to markets. The issue of acquisition and transaction cost has become very prohibitive to the emergence of new enterprises and to the growth and survival of existing ones. The issue of land provision and the land lease system has greatly constrained the chances of micro, small and medium enterprises who aspire to Start up businesses (Eshetu & Mammo, 2009).

Although various empirical studies have been conducted to assess the problems and prospects of leasing industry in different countries of the world and Development Bank of Ethiopia, there is a dearth of empirical study that examines the data on leasing aspects particularly in Development

Bank of Ethiopia Specifically Jimma Branch. Therefore, this study will make an attempt to bridge this gap and elaborate the Determinants of the lease financing service in case of Jimma zone.

This paper contributes to the growing literature on SME Lease finance. Its purpose is to shed light on current trends and practices in Development bank Ethiopia Lease financing of SMEs in Jimma zone.

2.7. Development of Hypothesis

Empirical literature and various theories for understanding lease financing service and its determinants have been discussed in the previous chapter. The rationale for the hypotheses chapter is to assemble conditional logical arguments based on theories and empirical evidence to explain why some factors are associated with lease financing service of DBE, Jimma branch. The chapter is organized as follows: determinants of lease financing service are discussed in the previous sections, comprising 8 hypotheses based on factors such as Effective lending rates (ELR), Transaction Factors (TRC), Firm age (FAG), Firm size (FSZ), Industry (IND), Banks Requirement for lease financing (BLFR), Management (MANT) and Infrastructure (INF).

Hypothesis 1

 H_0 : High effective lending rates could encourage SMEs from accessing to lease financing.

 H_1 :: High effective lending rates could discourage SMEs from accessing to lease financing.

Hypothesis 2

 H_0 : Transaction costs are not negatively influence SME access to lease financing.

 H_2 :: Transaction costs negatively influence SME access to lease financing.

Hypothesis 3

 H_0 : Firm age has no positive influence on SME access to lease financing.

 H_3 :: Firm age has positive influence on SME access to lease financing.

Hypothesis 4

 H_0 : Firm size has no positive influence on SME access to lease financing.

 H_4 :: Firm size has positive influence on SME access to lease financing.

Hypothesis 5

 H_0 : The type of industry has no positive association with SME access to lease financing.

 H_5 :: The type of industry has a positive association with SME access to lease financing.

Hypothesis 6

 H_0 : Banks Lease Financing Requirements has no Negative association on SME access to lease financing

*H*₆: Banks Lease Financing Requirements has Negative association on SME access to lease financing Hypothesis 7

 H_0 : Management has no influence on SME access to lease financing.

 H_7 :: Management has an influence on SME access to lease financing.

Hypothesis 8

 H_0 : There is no a significant positive association between Infrastructure and access to lease finance.

 H_8 :: There is a significant positive association between Infrastructure and access to lease finance.

2.8. Conceptual Framework

As described in chapter one the main objective of the study is to assess the challenges and opportunities of lease financing in DBE by focusing on the internal and external factors that affect the leasing operation. In the literature part different aspects of lease financing issues are addressed. As Creswell J. (2009) suggests that after summarizing the literature review, structuring it thematically or organizing it by important concepts to end the literature review is commendable. Therefore, in view of the various literatures reviewed the following conceptual framework is developed to provide a rationale for the study.

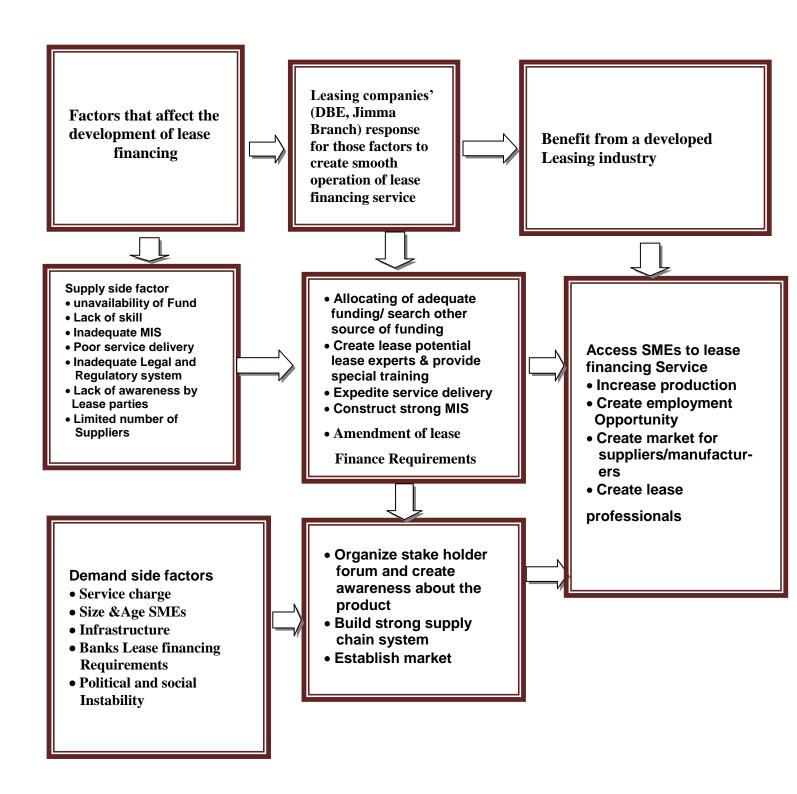


Figure 2.1 Conceptual framework

Source: - Customize from literature review and adopted from Abera (2016)

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Introduction

This chapter describes the methodology and overall design that were used to achieve the research objectives. The chapter is divided into four main parts. It starts by discussing the research paradigm/philosophy, data collection and analysis methods. This is followed by a section on population and sample and then different aspects of primary data collection instruments, based on their suitability for the study. The final part discusses the data collection mechanisms, particularly the survey questionnaire design. The chapter concludes with an ethical consideration, summary and conclusion.

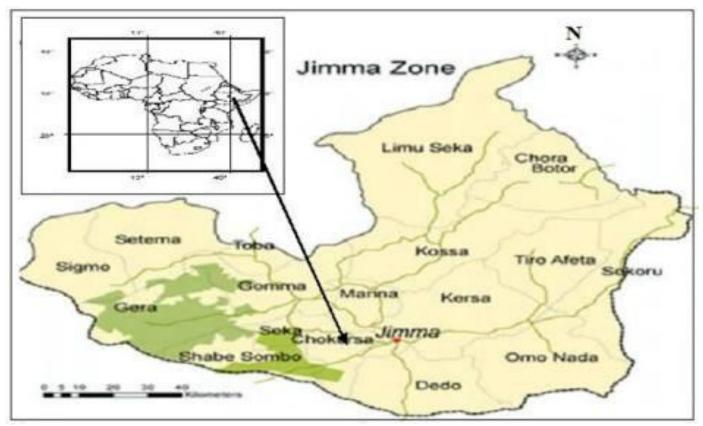
3.2. Description of the Study Area

Development bank of Ethiopia is a sole government owned bank and it has separate function from other banks operation in the country meaning it is mainly focusing on providing project loan for the priority area projects following the direction of the government and also since January 2016, it has been stated to render lease financing service to potential SMEs. The history of DBE goes back to 1909 when the first attempt of its kind known as "the societe' Nationale d' Ethiopia Pour Le Development De L'agfriculture te de Commerce "Was established in Minilik era.

Development Bank of Ethiopia (DBE) Jimma District is located in Jimma town southwest of capital Addis Ababa. It has one A grade Branch, two B Grade Branch and One C Grade branch. So that Jimma Branch is one of those branchs founds under Jimma district with Grade A category and its catchment area.

Similarly Jimma Branch extend lease financing service to SMEs those enterprises engaged in selected business activity by proving its viability based on viability assessment at appraisal stage. However, so far it has rendered this service only for one enterprise.

Jimma Zone is one of the zones of the Ethiopian Region of Oromia. It is bordered on the south by the Southern Nations, Nationalities and Peoples Region, the northwest by Illubabor, on the north by East Welega, and on the northeast by West Shewa; part of the boundary with East Shewa is defined by the Gibe River. Towns and cities in Jimma include Agaro, Genet and Saqqa.



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Figure 3.1: Map of Jimma Zone

Based on the 2007 Census conducted by the CSA, this Zone has a total population of 2,486,155 an increase of 26.76% over the 1994 census, of these 1,250,527 are men and 1,235,628 women; with an area of 15,568.58 square kilometers, it has a population density of 159.69. While 137,668 or 11.31% are urban inhabitants, a further 858 or 0.03% are pastoralists. A total of 521,506 households were counted in this Zone, which results in an average of 4.77 persons to a household, and 500,374 housing units.

Oromiffa was spoken as a first language by 90.43% and 5.33% spoke Amharic; the remaining 4.24% spoke all other primary languages reported. The majority of the inhabitants were Muslim, with 85.65% of the population having reported they practiced that belief, while 11.18% of the population practiced Christianity and 2.97% professed Protestantism (Wikipedia)

3.3. Research methods

According to Rajasekar, Philominathan and Chinnathambi (2013), research methods are the various procedures, schemes and algorithms are used in research. They are essentially planned, scientific and value-neutral and include theoretical procedures, experimental studies, numerical schemes and statistical approaches. Research methods help to collect samples and data and find a solution to a

research problem. In particular, scientific research methods call for explanations based on collected facts, measurements, and observations, and not on reasoning alone. Scientific research accepts only those explanations, which can be verified especially by use of experiments.

Research methodology is the science of studying the procedure of how the research is to be carried out. It outlines the techniques which investigators use while exploring, describing, explaining and predicting research phenomena (Rajasekar et al., 2013). It is therefore probable that each research study clearly sets out the philosophical assumptions and procedural framework from the start of the project so that a plan is prepared the findings will be explained.

3.4. Research paradigms

According to Denzin and Lincoln (1994), research paradigms are interpretative frameworks, which are guided by a set of beliefs and feelings about the world and how it should be understood and studied. Those beliefs include ontology, which deals with the question of what is real; epistemology, which studies the nature of knowledge and the process by which knowledge is acquired and validated; and methodology, which questions how we know the world, or gain knowledge about it (Clark and Johnson, 2009). There are a wide range of philosophical assumptions, but the ones commonly used in social sciences and management are ontology (realism vs. nominalism) and epistemology (positivism vs. anti-positivism or post-positivist) (Rajasekar et al., 2013). Ontology is concerned with the nature of reality, which raises questions over the assumptions researchers have about the way the world operates and the commitment to particular views. On the other hand, epistemology is generally a theory of knowledge largely concerned with the parameters that constitute knowledge in a social reality (Clark and Johnson, 2009). The debate on ontology and epistemology is competitive in terms of the choice between either the positivist or the interpretivist research philosophy (Bryman and Bell, 2007). The key paradigms often used in social science are positivist with which this research is proposed to be workout (the epistemological position that advocates working with an observable social reality (Bryman and Bell, 2010).

Positivism involves working with an observable social reality and the testing of hypotheses developed from existing theory; therefore, it is empirical in nature. Positivism assumes an external and independent existence from a social world, which then enables knowledge to be obtained through observations and which can in turn lead to explanations of the phenomena. To obtain valid knowledge, positivism relies on quantitative methods such as surveys, experiments and statistical analysis (Clark and Johnson, 2009). Thus, research from a positivist perspective often follows a

structured methodology so as to enable replication, and the emphasis is on quantifiable observation that leads to statistical analysis (Creswell, 2003).

3.5. Research design

Mixed methods research (MMR), established around 2000 (Lund, 2012) and also referred to as the "third methodological movement" (Venkatesh et al, 2013, p. 22), has become increasingly accepted by researchers. MMR, defined as a method of both quantitative and qualitative designs in the same research study, evolved in response to the observed limitations of both quantitative and qualitative designs.

Mixing the methods can complement each other, offer richer insights, and result in more questions of interest for future studies. The intent for mixing quantitative and qualitative research designs is to maintain the strengths and ameliorate the weaknesses in both designs (Creswell 2012; Gall, Gall, & Borg, 2007; Greenwood, & Terry, 2012; Salehi & Golafshani, 2010; Truscott, Swars, Smith, Thornton-Reid, XZhao, Dooley, Williams, Hart, & Matthews, 2010; Venkatesh et al., 2013).

The study used multiple linear regression approach, it offered a predictive analysis to explain the relationship between lease finance (dependent variable) and independent variables its determinants, such as Effective lending rates (ELR), Transaction cost (TRC), Firm age (FAG), Firm size (FSZ), Industry (IND), Banks Requirement for lease financing (BLFR), Management (MANT) and Infrastructure (INF). Multiple linear regressions provides better results in terms of significance of independent variables, confirmation of the hypotheses and also provides higher percentage of the explained variance in the models (Mary Nanyondo,2017) and also Multiple regression can accurately estimate the relationship between dependent and independent variables when the relationship is linear in nature (Osborne & Waters, 2002).

The following Multiple linear regressions models are specified:

LFS =
$$\beta_0$$
 + β_1 ELR + β_2 TRC + β_3 FAG+ β_4 FSZ + β_5 IND + β_6 BLFR+ β_7 MANT + β_8 INF + ϵ

With all factors anchored on a five-point Likert scale ranging from "1", strongly disagree, to "5", strongly agree. A five-point Likert scale was considered appropriate according to the recommendations of Raaijmakers et al. (2009), who suggest that such a scale minimizes bias on perception-oriented questions because of the provision for neutrality (not sure) among responses. The research is designed to examine the Determinants of lease financing in case of Jimma zone. Exploratory research design is also propose to be used to gain new insight about lease financing

service providing by the Bank. The population of the study will cover Jimma Branch offices, Graduated SME found under the study area and DBE, Jimma District Lease appraisal team, lease approval & lease review Teams.

3.6. Triangulation

Triangulation is a powerful technique that facilitates validation of data through cross verification from two or more sources. In particular, it refers to the application and combination of several research methods in the study of the same phenomenon.

It helps the researchers to choose relevant data collection methods, minimizes uncertainty reducing bias, minimizing personal effects on the research findings. 'However, it is important that the research question is clearly focused and not confused by the methodology, adopted and that the methods are chosen in accordance with their relevance to the topic.' (Ticehurst and Veal, 2000:51). As the triangulation 'can produce a more complete, holistic and contextual portrait of the object under the study' (Ghauri, e t al, 1995:94) it provides advantage to the research. Even it can be useful technique in complex phenomena. (Cohen and Manion, 1989:277).

Interview was used to collect data from financier's side. Triangulation of data collection techniques can give accurate and comparative results, which give rigor to discussions. Saunders et al. (2009) criticize the possibility of relying on a single method, on the premise that it may adversely affect the reliability and validity of the results. However, they recommend use of one extra method of data collection, for example interviews alongside Focused group discussion, to provide ultimate conclusions and to help cross-check findings for comparison purposes.

3.7. Definition and measurement of variables

Given that lease finance involves the supply side (lease finance providers) as well as the demand side (e.g. SMEs) it is important to try to reconcile the perceptions of what determines lease finance from both sides in order to improve our understanding of the determinants. Honohan and King (2009) suggest that if debt finance is to be understood, financiers must be involved, given that they are at the centre of decision making to advance finance to SMEs or not. Knowledge of the determinants of lease finance helps reduce lease finance barriers. For example, Beck et al. (2006) argue that banks requirement for lease finance; awareness of such a requirement will make SMEs work towards improving them and hence be able to leases finance more easily. SME access to lease finance is contingent on a number of micro-and macro-economic factors. In broad terms, they can be outlined as effective lending rates, transaction costs, firm age, firm size, industry, financial

transparency, education, experience, and infrastructure (Katz, 1982; Loderer et al., 2009; Apoga, 2013).

Table 3.1: Definition and measurement of variables

Variable	Measurement	Definition
β0	Intercept	
β1 β11	Coefficients	
Lease Financing Service (LFS)		Dependent Variable
β 1 =Effective lending rates (ELR)	Effective lending rate measured by 5 perception questions anchored on a five-point Likert scale of (1) strongly disagree to (5)	Interest rate, hidden fees, opaque conditions of maturity, and high leased machinery insurance amounts.
B2 =Transaction factors (TRC)	Transactions costs measured by 5 perception questions on fees, administrative expenses, opportunity costs and time, anchored on a five point Likert scale of (1) strongly disagree to (5) strongly agree	Non-interest-rate related conditions (e.g. maturity, covenants, etc., high debt/turnover ratio, cost of loan administration, transport, fees, communication and valuation of assets).
B3 =Firm age (FAG)	Respondents' mean rank of 3 items of information included in the questionnaire on a five-point Likert scale.	Number of years the enterprise has been in operation.
B4 =Firm size (FSZ)	Respondents' mean rank of 5 items of information included in the questionnaire on a five-point Likert scale.	Number of employees.
B5=Industry (IND)	Respondents' mean rank of 5 items of information included in the questionnaire on a five-point Likert scale.	Manufacturing and service.
B6=Bank Lease Financing Requirement (BLFR)	Mean rank of 4 questions relating to Lease financing requirements to be fulfilled with SME and access to lease finance, anchored on a five-point Likert scale.	Minimum requirements those should be fulfilled with SME to be eligible for lease financing service of the bank.
B7 =Management (MANT)	Mean rank of 6 perception questions relating to Managerial experience and access to lease financing service, anchored on a five-point Likert scale.	Knowledge, skills and capabilities of an entrepreneur or manager in dealing with lease financing service over a number of years.
B8 =Infrastructure (INF)	Mean rank of 5 perception questions relating to Infrastructure such as water, electric power and access to lease financing service, anchored on a five-point Likert scale.	Infrastructural Accessibility

3.8. Population

The researcher was used purposive sampling based on the requirement of information from the DBE, Jimma branch staffs those have performing lease financing on their day to day activity and Jimma District Lease appraisal team, lease approval & lease review Teams. And to get full information and to increase the strength of reliability of the research and also to collect information from Graduated SMEs found under study Area by selecting them using simple random sampling; lottery method. The researcher also used purposive sampling to collect data from the supply side

(DBE) just to get concrete information well and the quality of data which was gathered for the analysis increase the research validity.

3.9. Sample Size

The study was used stratified random sampling procedure to select a sample that represents the entire population. According to Kothari (2004), a stratified random sample is used when the population is not homogeneous, making it the appropriate sampling technique. According to Sekaran (2005), population is a group of individual, objects or items from which samples are taken for measurement or it is an entire group of persons or elements that have at least one thing in common. The study adopted probability sampling procedure. The procedure is suitable for the study as any item in the population of the study has an equal chance of being selected. A stratified random sample where population is divided into two or more relevant strata and a random sample drawn from each of the stratum were used for this study. Respondents from the demand side were stratified according to their sector with which they are found in, that they will be categorized under Agricultural, Industry and Service sectors.

The study is cross-sectional and also covered SMEs and financiers (DBE). A cross-sectional research design was considered suitable because of the nature of the study, which required information on enterprise characteristics, which change over time. These included location, age, number of employees, choice to operate a lease finance account at a point in time, level of minimum balance maintained in a deposit account and purpose for being having lease finance(desire). Justification for adopting a cross-sectional research design approach is given by Saunders et al. (2009) and Field (2009), who highlight that, unlike longitudinal studies, which are primarily observational without involvement of the subjects of the study in any form, a study that requires the use of current data requires self-administration of the questionnaires in a cross-sectional study. In addition, Raaijmakers et al. (2009) suggest that cross-sectional studies provide a general picture of the outcome and the characteristics associated with the study at a specific point in time.

As per information obtained from Jimma zone Job opportunity creation and food security office there are approximately 550 SMEs in the study area. Based on sample size determination technique of yemane's sampling method and the formula as stated below, a maximum number of 85 SMEs those are used as unit of analysis were considered appropriate for this study.

For the supply side information, The study used employees who are directly involved in lease financing operation of the Bank from the supply side, so as to get pertinent information for accurate result of the study. The method was applied purposive sampling. Purposeful sampling is a technique widely used in qualitative research for the identification and selection of information-rich cases for the most effective use of limited resources (Patton, 2002). This involves identifying and selecting individuals or groups of individuals that are especially knowledgeable about or experienced with a phenomenon of interest (Cresswell and Plano Clark, 2011).

As per data obtained from the Jimma branch, currently the Branch has 15 Lease financing officers including accountants and also District lease financing related job performer employees those found under Lease appraisal team, lease approval & lease review Teams are 16 numbers as of information obtained from Jimma District and the researcher proposed to obtain information on the challenges and opportunity of lease finance through Focused Group Discussion and Also a proposed to conduct interview with DBE, Jimma District Manager, branch managers and Team Leaders.

As per information obtained from Jimma zone Food security and Job opportunity creation bureau there are approximately 550 SMEs in found under study area. By using yemanes (1967) sampling method:

$$n = \frac{N}{1 + N(e)^2}$$
 Where:

n= the sample size

e= Acceptable sampling error

N= Population size (Total number of SMEs found in the study area)

Therefore, sampling error is assumed to be 0.1 or 10%.

$$n = \frac{N}{1 + N(e)^{2}} \longrightarrow \frac{550}{1 + 550(0.1)^{2}} \longrightarrow \frac{550}{1 + 550(0.01)} \longrightarrow \frac{550}{1 + 5.5}$$

$$\frac{550}{6.5} \longrightarrow 84.615 \approx 85$$

The questionnaires are dispatched using the division undertaken according to the population of SMEs per Sector, as indicated by Jimma zone Food security and Job opportunity creation bureau.

According to them, over one third of SMEs are categorized under the Industry sector (40%), under Agriculture sector (20%), and under Service sector (40%). Therefore, the distribution of questionnaires was guided by the population of SMEs located in the sector, as shown in Table 1.3 below.

Table 3.2: Questioner Administration by sector

Questionnaire	Total number of	Population of SMEs	Questionnaires
administration	SME found under	Registered in the	administered per
by Sector	this sector	sector (%)	Sector
Service	220	40	34
Industry	220	40	34
Agriculture	110	20	17
Total	550	100	85

In general the researcher dispatch questioner for those randomly selected 85 SMEs found under the study area selecting SMEs using simple random sampling; lottery method and also made interview with for 31 employees of DBE those are purposively selected employees.

3.10. Data Collection

The study used both primary and secondary data. Primary data was collected through questionnaire & interviews. Secondary data sourced from various available publications, article of association of companies, proclamations, regulations, brushers and banks reports.

The descriptions of the data collections instruments will be employed are presented as follows:

Questionnaire

In order to source primary data from respondents a structured questionnaire was prepared by incorporating some focus areas that include background information of respondents, their attitude towards adequacy and appropriateness of current lease financing for SME in DBE; their awareness towards internal and external factors determining lease financing service; nature of lease financing; types of products and equipment's leased; supply chain systems and prospects of leasing sector and also consisted of perception questions relating to determinants of access to lease financing service finance, covering; Effective lending rates (ELR), Transaction cost (TRC), Firm age (FAG), Firm size (FSZ), Industry (IND), Banks Requirement for lease financing (BLFR), Management (MANT)

and Infrastructure (INF) with all factors anchored on a five-point Likert scale ranging from "1", strongly disagree, to "5", strongly agree. A five-point Likert scale was considered appropriate according to the recommendations of Raaijmakers et al. (2009), who suggest that such a scale minimizes bias on perception-oriented questions because of the provision for neutrality (not sure) among responses.

Interview

Purposively selected senior staffs (lease finance experts from bank side) are interviewed separately to get good insight of the leasing practice under the study area. The interview allows the researcher some degree of flexibility at the time of interviewing for the pursuit of unexpected line of inquiry which arises at the study progresses.

Document Review

The Development banks reports, most recent leasing publications (including World Leasing Year Book), company policies and manuals, leasing laws, regulations and directives related to leasing business will be refereed.

3.11. Methods of Data Analysis

The gathered data was coded and analyzed using SPSS (Statistical Package for Social Science) version 20 Software. The data collected through the questionnaires were analyzed through method of data analysis was both descriptive & inferential method of analysis, The research used descriptive method to analyze data on respondents demographic characteristics and also to analyze data using central tendency measurements such as mean.

Besides, Inferential method analysis was used to infer the influence of major variables such as Effective lending rate, transaction cost, firm size, firm age, Industry, management, infrastructure & bank lease financing requirements on lease financing service by using linear regression.

Key information obtained through interview and document review is interpreted qualitatively and summarized in line with respective theme against the background of the research questions and objectives. Secondary data were analyzed quantitatively.

CHAPTER FOUR

4. DATA ANALYSIS AND PRESENTATION

4.1. Introduction

The main objective of this chapter is to report the results of the investigation into the Determinants Lease financing service among SMEs in Jimma Zone and the determinants of access to such finance, such as effective lending rates, transaction costs, firm size, firm age, industry, management, Infrastructures, and Bank lease finance requirement. Specifically, the results are intended to address the extent to determinants of access to lease finance among Jimma zone SMEs.

This chapter explains and discusses the results of findings based on the analysis done on the data collected. The results of the study are discussed by triangulating the different sources results such as questionnaires results, key informant interview, as well as document review results. The discussion attempts to accomplish the objectives of the study and answer the research questions to this end total of 85 questionnaires were distributed to randomly selected SME found under Jimma zone. 80 respondents have filled and returned the questionnaire & was used in this analysis. This is due to efforts made that the researcher provided the questioner for individuals who gathered from the selected SME and subsequent follow up to collect the distributed questionnaires. The survey respondents were located in SMEs found under Different Woredas of Jimma Zone & also Jimma District of Development Bank of Ethiopia.

The remainder of the chapter is organized as follows. Section 4.2 Respondents background information. Section 4.3 provides descriptive statistics on the determinants of lease financing service, while Section 4.4 presents the results of the Pearson correlation coefficients. Section 4.5 Classical linear regression model assumption Section 4.6 discusses the multiple linear regression results and Section 4.7 Testing hypothesis. Sections 4.8 Opportunities & supply side affecting lease finance service.

4.2. Background information of the respondents

The demographic characteristics of the respondents are analyzed in terms of age, gender, level of education, Year of being member ship of the enterprise. The demographic data output of the respondents from SPSS can be presented and discussed as follows:

Table 4-1. Description of respondents by age & Gender.

Disc	Discription		Percent	Valid Percent	Cumulative Percent
Age of respondent	Between 21-30	6	7.5	7.5	7.5
теоропаст	Between 31-40	35	43.8	43.8	51.3
	Between 41-50	37	46.3	46.3	97.5
	>50	2	2.5	2.5	100
	Total	79	100	100	
Gender of the	Male	59	73.8	73.8	73.8
respondent	Female	21	26.3	26.3	100
	Total	80	100	100	

Source: Survey Result, 2020

The respondents indicated their gender profile in terms of either male or female in order to determine the nature of gender relations with the study under investigation. As can be seen from the above table 4-1, most of the respondents are male; they accounted for 73.8% of the total respondents whereas female respondents cover only 26.3%. With regard to age concerned the majority of the respondents, about 46.3% will fall within the age of 41-50 years followed by the age category 31-40 years (43.8%), 21-30 years (7.5%) and greater than 50 years accounted to 2.5 %. One respondent did not indicate age.

Table 4-2 Description of respondents by Educational Level, Years of being members of the Enterprise & Current position of the Respondent in Enterprise.

-	Discription		Percent	Valid Percent	Cumulative Percent
Educational	Primary Education	18	22.5	22.5	22.5
level of the respondent	Secondary Education	21	26.3	26.3	48.8
гозропасти	Preparatory	13	16.3	16.3	65
	TVET	17	21.3	21.3	86.3
	Diploma	7	8.8	8.8	95
	First Degree	4	5	5	100
	Total	80	100	100	
Years of	<5	10	12.5	12.5	12.5
being a member of	Between 6-10	61	76.3	76.3	88.8
the	Between 11-15	9	11.3	11.3	100
Enterprise	Total	80	100	100	
Current	Casher	2	6.3	6.3	6.3
position in the enterprise	Manager	55	68.8	68.8	75
	Member	17	21.3	21.3	96.3
	Secretary	3	3.8	3.8	100
	Total	77	100	100	

Source: Survey Result, 2020

As can be seen on the table 4-2, about 26.3% of the respondents has education level of Secondary Education. And 22.5% of respondent from selected SMEs has Primary Education, 21.3% of respondents have TVET level of education. This shows that the respondents are capable and reliable to explore the issues related to the study.

As far as the work experience(Years of being member ship the enterprise) of respondents is concerned, they can have a significant impact in providing the relevant information by answering the appropriate answers in mindful to what has been the enterprise fretful with financial needs and what constrained them from accessing it. As depicted on the table about most majorities (76.3%) of the respondents is between 6-10 years since they have been member of the enterprise. Therefore, the probability of getting reliable information is very high as most of the respondents are experienced personnel & supposed to know their financial requirement and bottle necks to access it. The position of respondents also has significant contributions in providing the reliable and valid information for this study. As portrayed from the above table, majority of the respondent are in Managerial position accounted and three respondents are failed to explain their position. And this in turn assures the probability of getting reliable information.

4.3. Determinants of access to Lease finance

This section covers the descriptive statistics relating to the eight hypotheses underlying the determinants of access to Lease finance, as described in chapter two of this thesis. The descriptive statistics in Table 4.3 below indicate that Infrastructure (INF) has the highest mean, at 3.99, followed by Management (MANT), with a mean of 3.94. The other variables are Bank lease finance requirement (BLFR), with a mean of 3.86; Effective lending rate (ELR), with a mean of 3.84; transaction costs (TRC), with a mean of 3.50; Firm size (FSZ), with a mean of 3.45; Industry (IND), with a mean of 3.43; Firm Age (FAG), with a mean of 3.08.

Table: 4.3: descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
INF	80	1.80	5.00	3.9925	.69533	-1.084	.269	1.380	.532
MANT	80	1.00	4.83	3.9458	.62686	-1.857	.269	5.572	.532
BLFR	80	2.00	5.00	3.8625	.74937	567	.269	365	.532
ELR	80	2.33	5.00	3.8458	.72127	602	.269	598	.532
TRC	80	2.00	4.80	3.5050	.74831	106	.269	-1.136	.532
FSZ	80	1.50	5.00	3.4594	.82336	156	.269	769	.532
IND	80	1.20	4.80	3.4350	.73245	592	.269	.308	.532
FAG	80	2.00	4.33	3.0813	.57552	.056	.269	416	.532
LFS	80	-1.00	1.00	.7625	.45684	-1.659	.269	1.772	.532
Valid N (listwise)	80		/T 00	•				3.6.3.10D	

Definition of variables: LFS (Lease financing service), INF (Infrastructure), MANT (Management), BLFR (Banks Lease financing requirement), ELR (effective lending rates), TRC (transaction costs), FSZ (firm size), IND (industry), FAG (Firm Age).

Source: Survey Result, 2020

4.3.1. Discussion

The mean rank of 3.99 in relation to Infrastructure implies that SMEs perceive infrastructural problems such as absence of Electricity & other source of power and power interruption, which also include Insufficient and interrupted water supply. Similarly, SMEs believe that lack of business development service, lack of sufficient & quick transportation service. Furthermore, they consider that absence of Infrastructure such that lack of appropriate dry waste & sewage treatment which strengthens the access to lease financing barriers for SMEs.

Concerning Management, the mean rank of 3.94 implies that on average SMEs perceive management in terms of lack of clear division among members is of those hindering factor in access to lease finance, as well as poor organization & ineffective communication, and poor selection of business partner, lack of well trained & experienced employees, lack of low cost and accessible training facilities and also lack of financial, human and material management which interact to deceased access to lease finance. In relation to Bank lease finance requirement, the mean rank of 3.86 indicates that on average SMEs believe that 20% equity contribution required from SMEs to use lease financing service of the DBE is issue which hold back them to access to lease finance, which also includes banks requirements such as the amount of lease finance to be provided to SME shall not be less than one million birr, SME which would like to be financed with lease

finance should have to have a capital between 500,000-7.5 million birr, and lastly SME should also have to have manufacturing premises own owned or rented either from government or individuals.

Concerning Effective lending rate mean rank of 3.84 implies that SMEs perceive these rates to be higher than the quoted ones, which increases the cost of finance. Similarly, SMEs believe that effective lending rates are inconsistent, change over time and are not regulated at all by the central bank, which makes loans very expensive. Furthermore, they consider that the lending rates are not negotiable and only favorable to enterprises with high value collateral, and that even DBE have extreme interest rates, which strengthens the access to Lease finance barriers for SMEs.

The mean rank of 3.50 in relation to transaction costs indicates that SMEs perceive the conditions of loan maturity to be unfavorable; for example, extra fees, charges, transport and communication, high loan insurance amounts, and loan administration charges, which increase the cost of finance, therefore hindering them access to it.

The mean rank of 3.45 in relation to Firm size implies that on average SMEs perceive size of SME matters in access to Lease finance, as well as SMEs with large number of employees can access lease finance than those with small number of employees since those SMEs with large number of employees to be as of reputable business, size matters as long as other requirements are fulfilled. In relation to Industry, the mean rank of 3.43 indicates that on average SMEs perceive the industry in which the business operates is important for access to debt finance. They believe that manufacturing businesses obtain finance easily, while enterprises that offer services are usually rejected. SMEs also perceive that agriculture businesses are considered to be highly risky by financiers.

In relation to firm age, the mean rank of 3.08 indicates that on average SMEs believe that enterprise age matters in access to lease finance, as the longer the enterprise has stayed in operation, the easier it is to obtain lease finance. Financiers prefer SMEs that have been in operation for more than one year, but preferably finance is issued to those SMEs that have existed for over five years.

4.4. Correlation analysis

Table 4.4: Correlation coefficients

This table reports the values of the correlation coefficients for all variables adopted in estimating the relationship between LFS(lease financing service) and ELR (effective lending rates), TRC (transaction costs), FAG (Firm age),FSZ (firm size), IND (industry), MANT (Management), INF (Infrastructure), BLFR (Bank lease finance requirement) (N=80).

	ELR	TRC	FAG	FSZ	IND	MANT	INF	BLFR	LFS
ELR	1								
TRC	.753**	1							
	215	101							
FIA	217	191	1						
FIZ	205	253*	.243*	1					
IND	140	149	.024	.122	1				
NANIO	212	026	270*	C1 C**	070				
MANG	212	036	.270*	.616**	.079	1			
INFR	151	088	.199	.191	.078	.268*	1		
						ate ate	ata.		
BLFR	052		143		005	387**	239 [*]	1	
LFS	365**	323**	$.285^{*}$.593**	.369**	387** .507**	239 [*] .479 ^{**}	310**	1

^{*.} Correlation is significant at the 0.05 level (2-tailed).

The results in Table 4.4 above comprise of the correlation matrix for all the continuous variables for the possible presence of multicolinearity. Multiple correlations are estimate of the extent of the association between dependent and independent variables (Gujarati, D.N. (1995). Correlation analysis helps to find out whether multicollinearity is powerful to quash the inclusion of the independent variables at one point of time while performing Regression analysis. Multi-collinearity would be a difficulty if the correlation coefficient among the predictors is above 0.80 (Gujarati, 2004) and according to Hair (2009) cited in Birhanu, (2012) if the correlation coefficient among the predictor variables stands above 0.90, Multi-colinearity would be a serious problem.

The correlation matrix indicates strong positive associations between LFS, size (FSZ) and management (MANT), at a level of 1%. Similarly, the findings indicate a moderate positive relationship at a level of 1% between Industry (IND), Infrastructure (INF) & Lease financing service, where as the findings also indicate a moderate Negative relationship at a level of 1% between Effective lending rate (ELR), Transaction cost (TRC), Banks lease financing requirement (BLFR)& Lease financing service (LFS).

^{**.} Correlation is significant at the 0.01 level (2-tailed).

c. Listwise N=80

In relation to management (MANT), a strong positive relationship with LFS implies that of clear division of duties among members, Strong organization & effective communication, selection of better business partner, presence of well trained & experienced employees, affordable or low cost & accessibility of training and also availability of financial, human and material management, SME access to lease finance will increase. This is because such managerial capability maximizes SMEs to access lease finance and hence encourage them from access to LFS. Moreover, with education, the manager has the ability to communicate effectively and negotiate for better credit lines and terms, hence increasing access to lease finance, managerial experience (capability) with a positive relationship implies that SMEs perceive that when manager is knowledgeable on how to manage external finance, for example streamlining amortization schedules, or timely payments of the principal and interest, access to lease finance can increase. This is because financiers can easily trust such a manager to repay subsequent loan obligations on account of previous experience.

In respect to firm size, a positive correlation coefficient implies that size matters in access to lease finance, as the larger the size of the enterprises, the easier it becomes for them. This is because, over time, SMEs can hire qualified & larger number of employees, can have enhanced members with knowledge, experience & further more a member with a better financial position that the business would be reputable thus can easily access lease financing, negotiate better credit terms, contribute equity, and improve access to lease finance. The rationale is that SMEs that have larger in number of employees & larger; in number of member of SME are considered better to financial position, knowledge, business idea thus the larger the size of SME it would be resilient to financial pressures and therefore stand a better chance to access lease finance.

In respect to Industry, a moderate positive relationship with LFS implies industry in which the business operated is important for issue of lease financing, manufacturing business easily get lease finance service, this is because manufacturing sector is in line with economic transition of government plan thus these sector prioritize in the access to finance, manufacturing premises, land, electric power and other government support, since it create employment opportunity, technological imitation and hence encourage to accesses LFS. Service business are usually rejected and also those SME found under agricultural sector are highly risky to be financed with lease finance.

Infrastructure such as Electric power & its interruption, sufficient water supply, business development service, sufficient & quick transportation service and appropriate dry waste & sewage system maximize their extent of SME to access to lease finance. At the same time, if those infrastructure are availed for SME by the concerned government body, access to lease finance will

increase, because SMEs will be certain that no abrupt, if they lend machineries needed for their production activity from DBE, there are confident that they can manipulate in their full capacity & also deliver their product to the better market, which increases their profit and consequently improves access to lease finance.

In respect to Transaction cost (TRC), a moderate negative relationship with LFS implies that if the ex-ante costs associated with credit, such as administration fees, insurance charges, transport, communication, and unaffordable initial fees are maximized, SMEs access to lease finance will be minimized. This is because such ex-ante costs increase the cost of finance and hence discourage LFS. In respect to Industry, a moderate positive relationship with LFS implies industry in which the business operated is important for issue of lease financing, manufacturing business easily get lease finance service, this is because manufacturing sector is in line with economic transition of government plan thus these sector prioritize in the access to finance, manufacturing premises, land, electric power and other government support, since it create employment opportunity, technological imitation and hence encourage to accesses LFS. Service business are usually rejected and also those SME found under agricultural sector are highly risky to be financed with lease finance.

A relationship between Effective lending rate (ELR) and LFS show moderate or medium Negative relationships, at a level of 1%, with access to Lease finance implies that when effective lending rates (ELR) are High, for example above to the level of quoted interest rate, the extent of access to lease finance among SMEs will decrease. At the same time, if the lending rate is maintained and regulated by the central bank, access to lease finance will increase, because SMEs will be certain that no abrupt lending rate changes will occur, which minimizes losses and consequently improves access to lease finance.

A relationship between Banks lease financing requirement (BLFR) and LFS show moderate or medium Negative relationships, at a level of 1%, with access to Lease finance implies that DBE requirement to provide lease finance for SME those such as 20% equity contribution by SMEs, the minimum lease finance to be provided shall not be less than one million birr, SMEs capital shall be in-betweens 500,000-7.5 million birr & lastly SME should have to have manufacturing premises either from government or rented from individual and or own premises, which minimizes access to lease finance of SMEs.

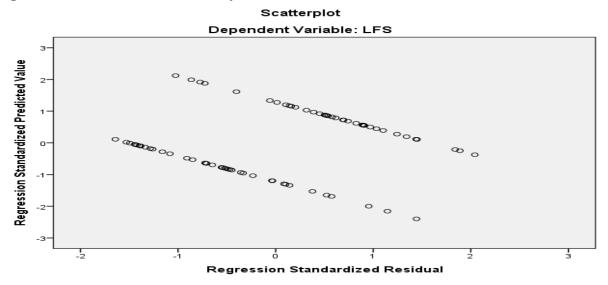
4.5. Classical Linear Regression Model (CLRM) Assumptions

Multiple Regression method is based on several crucial presumptions of Classical Linear Regression Model (CLRM). Specially, Multi-collinearity, Heteroscedasticity, and normal distribution of residuals are the major important assumptions. Accordingly, the researchers tested these four assumptions to check whether or not they fit in the models.

4.5.1. Hetroskedasiticity Test

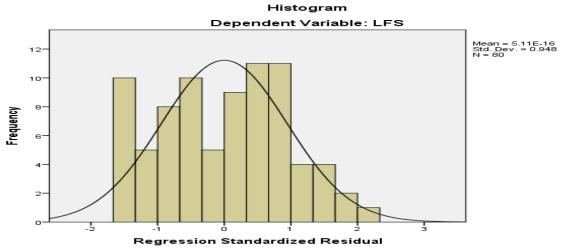
Classical Linear Regression Model assumptions are important for Heteroscedasticity. As noted by Brooks (2008), as we can see in the plot, the residuals have a random pattern, which signifies that there is no sign of Heteroscedasticity.

Figure 4.1: Test for Heteroscedasticity



Source: Output of SPSS version 20

Figure 4.2- Normality test



Source: Output of SPSS version 20

4.5.2. Multicollinearity

The degree of Multicollinerity among variables is measured based on Variance Inflation Factors (VIF) suggested by the rule-of-thumb. As per this usual threshold, if the Variance Inflation Factor on each variable is less than ten and 1/VIF exceeds 0.1, Multi-collinerity is not considered a stern problem.

Table 4.5: Degree of Multicollinearity for Variables.

Mc	odel		Unstandardized Coefficients		Standardized Coefficients		Co lin Stati		Reliability analysis Cronbach's Alpha
		В	Std. Error	Beta	t	sig	Tolerance	VIF	
1	(Constant)	-3.325	0.853		-3.9	0.000			
	ELR	-0.188	0.131	-0.173	-1.432	0.156	0.36	2.78	0.855
	TRC	-0.02	0.125	-0.02	-0.163	0.871	0.356	2.808	0.85
	FIA	0.069	0.114	0.047	0.604	0.548	0.874	1.145	0.877
	FIZ	0.614	0.158	0.385	3.878	0.000	0.533	1.877	0.855
	IND	0.432	0.12	0.265	3.592	0.000	0.965	1.037	0.837
	MANG	0.083	0.14	0.065	0.595	0.554	0.443	2.255	0.935
	INFR	0.347	0.091	0.296	3.831	0.000	0.877	1.14	0.854
	BLFR	-0.15	0.088	-0.14	-1.709	0.000	0.783	1.276	0.842

Source: Output of SPSS version 20

Here the Variance Inflation Factor (VIF) for all variables is significantly less than 10 and the 1/VIF is significantly exceeds 0.1. Therefore, the researchers concluded that Multi-collinearity is not a serious concern for the present model of this study.

Furthermore in Table 4.5, it is clear that the reliability value was likely between 0.842 and 0.935 values. If the above calculated reliability values are compared with the standard Alpha value of 0.5 as advocated by Cronbach, then it can be practically assumed that the scales used by the researchers are trustworthy for data analysis. George and Mallery (2003) provide the following rules of thumb: $"_> .9 - \text{Excellent}, _> .8 - \text{Good}, _> .7 - \text{Acceptable}, _> .6 - \text{Questionable}, _> .5 - \text{Poor and } _< .5 - \text{Unacceptable}"$ (p. 231).

4.5.3. Normality Assumption

The last diagnostic test for (CLRM) assumptions classical linear regression model) assumption of normality was tested by this study. The assumption says that disturbances are normally distributed. We draw a vertical straight line through the center of the curve then it should divide both sides

equally. This is known as a normal distribution and is represented by the bell-shaped curve in Figure 2 at above.

4.6. Multiple Regression Output and its Discussion

In order to achieve objectives of the study, Multiple Regression was conducted to find out the effect of predictors on outcome variable. Regression of Lease financing service (LFS) on Effective lending rates (ELR), Transaction cost (TRC), Firm age (FAG), Firm size (FSZ), Industry (IND), Banks Requirement for lease financing (BLFR), Management (MANT) and Infrastructure (INF). The econometrics model employed in this study was the following:

LFS ==
$$\beta 0 + \beta 1x1 + \beta 2x2 + \beta 3x3 + \beta 4x4 + \beta 5x5 + \beta 6x6 + \beta 6x6 + \beta 7x7 + \beta 8x8 + \epsilon$$

Table 4.7: Coefficient of Linear Regression

Unsta	Unstandardized Coefficients			Standardized Coefficients			
Model	В	Std. Error	Beta	Т	Sig.		
(Constant)	-3.325	0.853		-3.9	0.000		
ELR	-0.188	0.131	-0.173	-1.432	0.156		
TRC	-0.02	0.125	-0.020	-0.163	0.671		
FIA	0.069	0.114	0.047	0.604	0.548		
FIZ	0.614	0.158	0.385	3.878	0.000		
IND	0.432	0.12	0.265	3.592	0.000		
MANG	0.083	0.14	0.065	0.595	0.554		
INFR	0.347	0.091	0.296	3.831	0.000		
BLFR	-0.15	0.088	-0.140	-1.709	0.000		

Dependent Variable: LFS

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson			
1	.792 ^a	.627	.585	.64799	1.529			
a. Predictors: (Constant), BLFR, IND, FIA, TRC, INFR, FIZ, MANG, ELR								

a. i realotors. (oonstanty, bei it, iitb, i iz, iito, iiti it, i iz, iiizit

b. Dependent Variable: LFS

Source: Output of SPSS version 20

After running this equation using SPSS 20, the regression model was as follows.

 $LSP = -3.325 - 0.188 \; ELR - 0.02 \; TRC + 0.069 FIA + 0.614 FIZ + 0.432 IND + 0.083 MANG + 0.347 INFR-0.15 BLFR$

The ANOVA result, shown in Table 4.7, presents F-statistics with probability values for the regression. The explanatory power of independent variables such as Effective lending rates (ELR),

Transaction cost (TRC), Firm age (FAG), Firm size (FSZ), Industry (IND), Banks Requirement for lease financing (BLFR), Management (MANT) and Infrastructure (INF) was 79.2%. The result of Adjusted R-squared shows that change on dependent variable Lease financing service (LFS) was significantly explained 62.7% (Sig. =0.000) by entire set of predictors employed in the study. However, 37.3% of change in dependent variable (LFS) was explained by unknown variables.

Table 4.7 shows that Firm age (FIA), Firm size (FIZ), Industry (IND), Management (MANG) and Infrastructure (INFR) had positive coefficients. The positive coefficient indicates that there was direct relationship between those variables and LFS.

The variables, Firm size (FIZ), Industry (IND) and Infrastructure (INFR) are significant at 1% significance level. Whereas Firm age (FIA) & Management (MANG) had a statistical value more than 1%, 5% or 10% significance level, which means Firm age & Management had a positive coefficient with no significant impact on lease financing service, besides

However, opposite association between Effective lending rates (ELR), Transaction cost (TRC) and Banks Requirement for lease financing (BLFR) with lease financing was also found as indicated by negative signs of coefficients. Whereas Banks Requirement for lease financing (BLFR) are significant at 1% significance level, but Effective lending rates (ELR) & Transaction Cost (TRC) had a statistical value more than 1%, 5% or 10% significance level, which means Effective lending rates & Transaction cost a negative coefficient with no significant impact on lease financing service.

4.7. Testing of Hypotheses

The hypotheses testing based on Regression model output is shown below:

 H_1 :: High effective lending rates could discourage SMEs from accessing to lease financing.

From the Table 4.7, it can be observed that Effective lending rate has -0.188 beta coefficients, which shows that if Effective lending rate is increased by 100%, Lease financing service will be decreased by 18.8% keeping other factors constant. Effective lending rate has a negative influence on Lease financing service of SMEs in Jimma zone.

Effective lending rate is statistically insignificant (P>0.1= 0.156) indicating no significant consequence on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch and thus fail to reject null hypotesis.

 H_2 :: Transaction costs negatively influence SME access to lease financing.

Transaction cost has -0.02 beta coefficient, as depicted in Table 4.7, which shows that if Transaction cost is increased by 100%, Access to Lease financing service gets decreased by 2% by controlling other factors constant. Since the beta coefficient of Transaction cost has a negative sign it has negative influence on Lease financing service of SMEs in Jimma zone.

,but Transaction cost has insignificant (P=0.871) impact on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch and. Thus, fail to accept this particular hypothesis.

 H_3 : Firm age has positive influence on SME access to lease financing.

As it is shown in Table 4.7, Firm age has 0.069 beta coefficients, which shows that if Firm age is increased by 100%, Loan settlement will be increased by 6.9% by controlling other factors. Since the beta coefficient of Firm age has a magnitude of positive sign.

Firm size has a strong positive impact is statistically insignificant (P>0.1= 0.548) indicating no significant consequence on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch and thus this hypothesis could not be accepted

 H_4 : Firm size has positive influence on SME access to lease financing.

As it is shown in Table 4.7, Firm size has 0.614 beta coefficients, which shows that if Firm size is increased by 100%, Access to lease financing service will be increased by 61.14% by controlling other factors. Since the beta coefficient of Firm size has a large magnitude of positive sign, Firm size has a significant (P=0.000) and positive impact on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch, thereby leading to Accept this hypothesis.

 H_5 : The type of industry has a positive association with SME access to lease financing.

As it is depicted in Table 4.7, Industry has 0.432 beta coefficients, which shows that if type of industry with which SMEs found under is (suitability) in the needs of the financer thus; access to lease financing service will be Increased by 43.2% keeping other factors constant. Since the beta coefficient of Industry has a large magnitude of positive sign, Industry has a strong positive impact and has a significant (P=0.000) on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch, thereby leading to accept this hypothesis.

*H*₆: Banks Lease Financing Requirements has Negative association on SME access to lease financing Bank lease financing requirement has -0.15 beta coefficient, as depicted in Table 4.7, which shows that if Bank lease requirements are increased by 100%, Accesses to lease finance gets decreased by 15 % by controlling other factors constant. Since the beta coefficient of Bank lease financing requirement has a negative sign, Bank lease financing requirement has a negative & has significant

(P=0.00) impact on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch, thereby leading to accept this particular hypothesis.

H₇: Management has an influence on SME access to lease financing

As it is shown in Table 4.7, Management has 0.083 beta coefficients, which shows that if managerial capability is increased by 100%, SMEs access to Lease financing service will be increased by 8.3% by controlling other factors. Since the beta coefficient of management has a large magnitude of positive sign, and also has insignificant (P=0.554) and positive impact on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch, thereby fail to reject null hypothesis.

 H_8 :: There is a positive association between Infrastructure and access to lease finance.

In the Table 6, it can be observed that Loan settlement schedule has 0.347beta coefficient, which shows that if Infrastructure is increased by 100%, Access to lease financing service will be increased by 34.7% keeping other factors constant. Since the beta coefficient of Infrastructure has a Positive sign, Infrastructure has a positively & significant (P=0.00) influence on Lease financing service of SMEs in Jimma zone, financed by DBE, Jimma branch, thereby leading to accept this hypothesis.

4.8. Opportunities & supply side factors affecting lease financing service.

The researcher initially proposed to undertake focused group discussion in order to indentify the supply side factors affecting lease financing service and also challenges and opportunity of lease finance, but due to the outbreak covid-19 deadly virus unable to undertake focused group discussion because of the precaution to be undertaken that avoiding in group collection of individuals was highly recommended in order to combat the transition of the virus, therefore the researcher diverted the focused group discussion into individual interview which minimize the gathering of individual and in line with health professionals recommendation.

The interview was undertaken between 15 Lease financing officers including accountants and also District lease financing related job performer employees those found under Lease appraisal team, lease approval & lease review Teams.

The researcher obtained information on the supply side factors affecting lease financing service and also challenges and opportunity of lease finance through the newly reassigned method: Interview. And the following issues were discussed during interview.

Regarding interest rate, Interest rate calculated on DBEs lease financing service was minimum than that of project financing of the bank, and even less than the interest rate calculated on loan granted by commercial banks, thus interest rate was minimal, and affordable for SMEs to be benefitted with lease financing.

Interest rate can't be said high, because it is low as compared to the interest/charge/ of the banking industry and has a very small difference with the saving or minimum bond rate of the country and which is about 8.5 to 11.5% based on the industry with which SMEs found in .

SMEs paid up capital Witten on the paper (Business license) is not found on ground thus some SMEs are unable to raise equity contribution and fail to fulfill working capital requirement of their business, thus these may hinder them to access to lease financing service of DBE, Jimma branch. Paid up capital required to be eligible for lease financing service of the bank is exaggerated and for most of SMEs it is not affordable.

Most of machinery acquired through lease finance are power driven, so that they are power (electricity) based but most of SME s are failed on the way in electricity and which discourage them to access lease financing service because they may afraid of interest calculated on their debt even if they are not working with those machineries for the reason that of infrastructural problems.

Most majorities of SMEs are less capable or does not want to have machinery for their business with a minimum cost of one million birr as per banks requirement rather they need small machineries which costs mostly less than one million birr.

In general the following factors are found the main challenges and opportunity of lease financing service of DBE, Jimma branch from the interview made with selected DBE, Jimma branch employees.

4.8.1. Opportunities of lease financing service in Development Bank of Ethiopia, Jimma branch.

Lease financing service provided by DBE including Jimma branch is in the Form of Hire purchase modality which assures owner ship right of the lessee at each installment period and after the final installment the machinery would be the property of the enterprise. And also Lease financing provided by DBE, Jimma branch has high market potential throughout, Jimma zone especially for SMEs engaged in tourism, mining, & Agro processing since the area has a potential on those areas.

The government has strong support for the development of leasing business. The areas of leasing business (sectors selected by the Bank such manufacturing, agriculture including mechanization, tourism, agro-processing and the like) are vital to the growth and development of the leasing business.

Lease financing service provided by DBE, Jimma branch will enhance SMEs development in terms of technology transfer, produce quality output using latest machineries which will make them competent in the market thus; increase their profit. Lease financing service provided by DBE, Jimma branch will create employment opportunity.

Lease financing service of the Bank has contributing its part for promoting export and import substitution. it helps to make use of untapped natural resources found under jimma zone it is also an alternative source of finance by create new investment opportunities

Lease financing service providing by the DBE, Jimma branch will create opportunities for suppliers and manufactures including local producers (replicators) of machinery such as TVET College, university & machinery inventor individuals.

4.8.2. Challenges of lease financing service in Development Bank of Ethiopia, Jimma branch.

Lack of adequate capital is the main problem in the Bank, Lack of working capital required to run the business.

Most of SMEs found under jimma zone has dearth in knowledge of preparing business plan for the proposed lease finance; Lack of adequate hard currency is obstacle for procuring capital goods from abroad.

Lease financing Policy of the Bank has not clearly developed to provide lease financing service based on real situation of SMEs within the area they found, specially policy such as minimum lease financing provided to SMEs must be greater than one million birr and the like are the main constraint.

There is problem of information Management system and network in the District and Branches under the District for smooth operation of lease financing service. Lease financing service cycle time (from application receiving to delivering the machine) is not short and does not satisfy SMEs needs.

Limited number of suppler of machineries in local source is the main problem of leasing business in DBE, Jimma branch and Capital goods and its accessories have not been delivering at once to the lessee. And also Lack of market is a key problem of operational lease projects (SMEs).

All leasing players or stakeholders have not been collaborating or working with the Bank to enhance leasing awareness of SMEs, documents required to be fulfilled with SME are not even on time provided for them from the stakeholders, In general bureaucracy in the government organization.

CHAPTER FIVE

5. SUMMARY, CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

5.1. Introduction

This chapter begins Section 5.2 summery of the research and section 5.3 conclusions, section 5.4 provides recommendation for further research and finally Section 5.5 the study limitations.

5.2. Summary

The research questions were investigated through a positivist approach, in which a quantitative method was used to measure the extent of access to Lease financing service (dependent variable) and its determinants (independent variables), with perception questions anchored on a five point Likert scale of "1" strongly disagree to "5" strongly agree. The study was cross-sectional, conducted on SMEs operating within Oromia regional state, Jimma Zone, and DBE, Jimma branch from the financier's side. From the demand side, a total population of 550 graduating SMEs was registered and operating in Jimma Zone was taken from the statistics offered by the Jimma zone Trade and industry Bureau.

After stratifying them in three by using the sector with which they are found in and selected to the proportion of the sector from population, 80 SMEs was selected using yemanes formula thus 34 SMEs from service sector, 34 from Industry, 17 from agricultural sector each. A simple random sampling lottery method was employed, through which every SME in each sector with which they are found in had an equal chance to be selected in the sample. So that for 85 SMEs found in Jimma Zone were issued questionnaires of which 80 questioners were responded & returned back.

These were tested for structural validity and reliability; the result of the Cronbach Alpha coefficient relating to the questionnaire was 0.84, the reliability value was likely between 0.842 and 0.935

values, then it can be practically assumed that the scales used by the researchers are trustworthy for data analysis.

Finally, the response rates from the main study were 94% from SMEs these is because questioners were disseminated to SMEs through respective woredas SME cooperator expertise in close collaboration with zonal office, In addition to that the researcher used Interview method of data collection in order to gather information on the supply side factors affecting lease financing service and also challenges and opportunity of lease finance in the study area

In terms of the determinants of Lease finances service, the variables of effective lending rates, transaction costs, firm age, firm size, Industry, Infrastructure, Management & Bank lease financing as significant predictors among SMEs in Jimma zone. Four hypotheses of this study, i.e H4 (firm size), H5 (Industry), H6 (Bank lease finance Requirement), and H8 (Infrastructure) were confirmed as determinants of Lease finance among SMEs in Jimma zone.

Regarding the challenges of lease financing service challenges such as dearth in banks capital, lack of knowledge to prepare business plan by SMEs side, Hard currency, some banks lease finance requirements have not taken real situation of SMEs into consideration, Information management system problem, Lengthy in service cycle time, limited number of supplier of machineries, lack of market for SMEs product, lack of collaboration of stockholder with the bank, lack of working capital from SMEs side are the major challenges of lease financing service in the study area.

Regarding opportunity of lease financing service, Hire purchase of lease modality, high market opportunity of lease finance, government support and sector selected by the bank are vital to the growth and development of leasing business, enhance SMEs development in terms of technology transfer, quality production, and lease financing service creates employment opportunity, improves export & import substation, helps in resource utilization, creates market opportunity for local machinery producer.

5.3. Conclusion

In order to eradicate poverty among poor section of the society through profitable Income generating Activities and accumulating the resources for the flexibility of their households particularly during occurrence of unexpected shocks and to keep up its role to the nations' economic growth and development, ensuring access to formal finance is a crucial task.

However, Most of financial sector has been reluctant to extend small scale Loans to small and medium enterprises mainly due to absence of collateral. In order to come across the financial problem of SME, DBE has launched new (for our country) financial service which is called lease

finance through which machineries, accessories & Equipment used in production process are financed for in the form of hire purchase modality free of collateral.

Even though DBE, Jimma branch has started officially to render financial service for mainly SMEs found under Jimma Zone, as of information obtained from the branch thus far these finance has not been extended for SME. The researcher want to know what are factors affecting SMEs found under Jimma zone that to access to Lease financing service.

It was found in this study that firm size of respondents positively & significantly determines Lease financing service of SMEs In simple words, the larger the firm, can access lease finance in a better way. Hence, DBE Jimma branch should also target the smaller SMEs in their intervention.

One of the strongest and the variables positively determining Lease financing service found was Infrastructure. In other words, the better the infrastructure would makes SME access to lease finance in their best position, thus Infrastructures such as Electricity, water, Transport, business development service should be fulfilled in order to boost Access of SMEs to lease finance.

The next important factor that significantly determines lease financing service of SMEs discovered was Banks lease finance requirement. Those requirements such as 20% equity contribution, one million birr of minimum lease finance amount and the required paid-up capital from SMEs negatively affect access of SMEs to lease finance service under the study area Finally, Industry in which SMEs categorized under were also have a positive and significant effect on Access to lease financing service of SMEs under the study area i.e. firms found under Manufacturing sector can easily access lease finance compared to service & Agricultural sector thus the bank should aware of SMEs that all sector can access, and example for those SMEs founded under Agricultural sector can access machineries & equipment for agricultural Mechanization on lease financing mode of finance of the bank.

5.4. Recommendations

The important policy suggestions that emanate from the findings of the present study are presented as Follows;

- SME perceives that, the larger the firm in size, can access lease finance in a better way.
 Hence, DBE should give due attention in providing information that smaller ones can access
 lease finance as off lease financing procedure of the bank, thus should develop or design a
 curriculum that provide awareness through conference, disseminating brochures prepared in
 local language, media such as radios.
- Bank lease finance requirements found negative determinant of lease financing service in the study area these because requirements such as 20% equity contribution by SMEs, the

minimum lease finance to be provided shall not be less than one million birr, SMEs capital shall be in-betweens 500,000-7.5 million birr & lastly SME should have to comprise manufacturing premises either from government or rented from individual and or own premises, which minimizes access to lease finance of SMEs, therefore the bank should amend its requirements as discussed above after undertaking area based study which identify existent situation of SMEs; the ability of SMEs to raise equity, minimal lease finance needs, and also amend capital required including micro enterprises with which their capital is less than 500,000.00. On the other hand enterprises should be consulted to increase their saving habit rather than dividing the dividend so that they can contribute equity and would improve their capital status after being funded with lease finance.

- Infrastructure found positive determinant of lease finance hence availability of infrastructure such as electric power, water supply, business development service, sufficient & quick transportation service will increase SMEs access to lease finance therefore government should provide due attention to fulfill those facilities since government is responsible for.
- Industry is also found the other positive determinant of lease financing service thus the bank should work in providing information that other than manufacturing sector which is perceived as of those easily get lease finance, SMEs engaged in agricultural sector can access lease finance, hence the bank has separate means of lease finance called agricultural mechanization therefore they can access agricultural implements for their work. On the other hand as per information obtained from lease financing policy of the bank, they can't render the service for SMEs found under service sector thus the bank should work on the way with which those SMEs under service sector linked their business through producing their input using lease finance & also studying the way with which SMEs engaged in service sector can access lease finance in a way that added value on their product.
- The bank should work on it to solve challenges of lease financing service such as dearth in banks capital, lack of knowledge to prepare business plan, Hard currency, some banks lease finance requirements have not taken real situation of SMEs into consideration, Information management system problem, Lengthy in service cycle time, limited number of supplier of machineries, lack of market for SMEs product, lack of collaboration of stockholder with the bank, lack of working capital from SMEs side are the major challenges of lease financing service in the study area.

• SMEs, The bank & stockholders should give emphasis to the prospects of lease financing service by taking the opportunity of the service into consideration, such as Hire purchase of lease modality, high market opportunity of lease finance, government support and sector selected by the bank are vital to the growth and development of leasing business, enhance SMEs development in terms of technology transfer, quality production, and lease financing service creates employment opportunity, improves export & import substation, helps in resource utilization, creates market opportunity for local machinery producer and by solving the problems identified as constraints of lease finance.

5.5. Limitations of the study

Although the research findings have important allegation, like in any other empirical study, they may suffer from limitations, which need to be acknowledged. First, Determinants of lease financing service in Jimma zone has limitations; for example, the degree to which discouraged borrowers can be excluded is open to debate. This is because, unlike voluntary excluded SMEs (not seeking finance at all example because of religious restraint), discouraged SMEs want lease finance but do not seek it because they think it will not be granted.

Even though the researcher proposed, SMEs found under the study area have ample information concerning lease financing service of the DBE, Jimma branch; there is also open to debate in excluding of those SME which has no information on lease finance.

References

- 1. Abreham Gebeyehu (2002), "Loan repayment and its Determinants in Small-Scale Enterprises
- 2. Financing in Ethiopia: Case of private borrowers Around Zeway Area", M. Sc. Thesis, AAU.
- 3. African Development Bank (2011), Federal Democratic Republic of Ethiopia, Country Strategy Paper, April 2011. *African Economic Outlook*, 2012.
- 4. AsfawAbera Olana, 2016 lease financing in Ethiopia, assessment of five regulated lease financing companies.
- 5. Ayyagari, M., Beck, T., and Kunt, D. 2007. "Small and Medium Enterprises across the Globe.
- 6. Befkadu Nigussie, 2018 leasing financing in Ethiopia, assessment of three regulated lease financing companies.
- 7. Capital goods leasing business proclamation number, 103/1998
- 8. Capital goods leasing business proclamation number, 807/2013
- 9. CGAP and IFC.2013. Financial Access 2012: Getting to a More Comprehensive Picture.
- 10. Creswell, J.2009. Business research methods: qualitative, quantitative, and mixed methods approaches, 2nd edition, Sage publisher, California
- 11. Competroller's Hand Book, 2014: Safty and Soundness of lease financing
- 12. Dagnachew Nuguse, 2019 *challenges of small and medium enterprise lease financing*: the experience of Development bank of Ethiopia
- 13. Development Bank of Ethiopia (2016) 'lease financing policy' Addis Abeba January 2016.
- 14. Development Bank of Ethiopia (2016) 'lease financing procedure manual' Addis Abeba January 2016.
- 15. Gallardo J. (1997), "Leasing to Support Small Businesses and Microenterprises", World Bank Policy Research Working Paper 1857, Washington D.C.
- 16. George and Mallery (2003) (p. 231).
- 17. World Bank, 2014 world's most comprehensive database on financial inclusion.
- 18. Federal Democratic Republic of Ethiopia (FDRE) (1998) 'Capital Goods Leasing Business' *Proclamation* No. 103/1998 (Addis Ababa, Federal Negarit gazette 4th year No. 27 March, 1998).

- 19. Federal Democratic Republic of Ethiopia (FDRE) (2013) 'Capital Goods Leasing Business' Proclamation No. 103/1998 & 807/2013 (Addis Ababa, Federal Negarit gazette 9th year No. 60 July, 2013).
- 20. Haradhan Mohajan (2011), the leasing financing in Bangladesh: a satisfied progress in business and industrialization.
- 21. Helen Tedla, report on Leasing Regulatory Framework Analysis and Intervention Options for the PRIME Project.
- 22. IFC.2011. SME Finance Policy Guide. Washington, DC.
- 23. International Finance Corporation (IFC). 2009. Leasing in Development: Guidelines for Emerging Economies, Washington, DC.
- 24. International Monetary Fund (IMF). 2013. Ethiopia country report No. 13/308.
- 25. Kraemer-Eis, H., and Lang, F. 2012. The importance of Leasing for SME Finance.
- 26. Mohamed Amini(2017, challenges and opportunities in reaching SMEs through leasing "Egypt experience"
- 27. Patton MQ. Qualitative research and evaluation methods. 3rd Sage Publications; Thousand Oaks, CA: 2002.
- 28. Sintayehu Abebe, 2019 the opportunities and challenges of lease financing service in development bank of Ethiopia.
- 29. World Bank (2015). SME Finance in Ethiopia: Addressing the Missing Middle Challenge. Washington, DC.
- 30. World Bank Enterprise Survey, 2011.
- 31. Yanging Shi & Xiaolan Xu (2015, leasing in China: overview of lease finance in china.

Research Questionnaire

Dear Respondent,

This questionnaire is prepared to collect data from SMEs found in Jimma zone, it's to undertake this for partial fulfillment of MSC in Developmental Economics on the title "Determinants of Lease Financing Service: in case Jimma zone". The information you provide will be used only for analysis of the study which I am conducting as partial fulfillment of the MSC degree in Developmental Economics.

I kindly request you to respond freely and honestly as your response has great value in assessing Determinants of Lease Financing Service in case of Jimma zone.

Moreover, I assure you that all your responses will be kept strictly confidential and use only for academic purpose.

If you need any clarifications, please contact me through my e-mail address:

firewualemyehu@gmail.com or please give me a call at +251-902-83-97-00.

Thank you for your valuable time and response in advance.

Yours Sincerely,

Firew Alemayehu

Questions for Focused Group Discussion

1. What are the opportunities of lease financing service in Development Bank of Ethiopia, Jimma Branch?
2. What are the major challenges of lease financing service encountered by DBE, Jimma Branch?
3. what are factors affecting of lease financing service encountered by DBE, Jimma Branch?
General instruction: ✓ No need to write your name ✓ Please make (✓) mark in the box that best describes your response ✓ Please write your opinion on the blank space provided and for some items you can use other sheets of paper if the space provided is not sufficient. Section I. Demographic characteristics of Respondents 1. Age □ < 20 □ 21-30 □ 31-40 □ 41-50 □ >50 2. Gender Male □ Female □ 3. Educational level Diploma □ 1st Degree □ 2nd Degree □ PHD □ 4. Years of being a member of the Enterprise Less than 5 years □ 6-10 years □ 11-15 years □ 16-20 years □ Over 20 year's □ 5. Current position in your Enterprise
Section III. Determinants of Lease financing Please state your opinion on the following statement by ticking the most appropriate response as follow 1) 5= SA=Strongly Agree 2) 4= A= Agree 3) 3= N = Neutral 4) 2= D = Disagree 5) 1= SD = Strongly Disagree

1	Effective Lending rates	SD (1)	D (2)	N (3)	A (4)	SA (5)
1.1	Quoted interest rate charged on Lease finance is too high					
1.2	The lending rate changes over time and not regulated which makes lease					
	finance very expensive					
1.3	Cost of Lease finance quoted by DBE is not negotiable and only favorable					
	to enterprises with high value collateral					
2	Transaction cost					
2.1	The conditions of loan maturity are unfavorable E.g. paying fees,					
	charges, transport and communication					
2.2	SMEs usually take low lease loan amount which increase cost of					
	administration					
2.3	DBE, Jimma branch has a separate arrangement of credit suit SMEs needs					
2.4	SMEs lack of asset to meet working capital requirement					
2.5	More costly to gather reliable information on SMEs					
3	Firm Age					
3.1	The longer it has stayed in operation the easier it is to get finance					
3.2	Firm age does matter as long as the SMEs qualifies to get lease finance					
3.3	DBE, Jimma Branch prefers SMEs that have at least been in operation for					
	more than 1 Year					
3.4	Finance is issued to those SMEs that have stayed for over 5 years					
3.5	DBE, Jimma Branch will issue finance to new SMEs as well					
3.6	Firm age is not DBE, Jimma branch concern to issue lease finance					
4	Firm Size					
4.1	Size of the SME matter in access of lease finance					
4.2	Large number of employees is an indicator that the business is reputable					
	therefore can access of lease finance					
4.3	Size does not matter at all as long as other requirements are met					
4.4	Firm size not a concern to issue lease finance					
5	Industry					
5.1	Industry in which the business operated is important for issue of lease					
	financing					
5.2	Manufacturing business easily get lease finance service					
5.3	Service business are usually rejected					
5.4	Agriculture is highly risky					
5.5	Industry does not matter as long as other requirements are met					
6	Management					
6.1	Lack of clear division of duties among members can't determine lease					
	financing service					
6.2	Poor organization and ineffective communication can't determine lease					
	financing service	<u> </u>				<u> </u>
6.3	Poor selection of business partners can't determine lease financing service					
6.4	Lack of well trained and experienced employees can't determine lease					
	financing service					

6.5	Lack of low cost and accessible training facilities can't determine lease		
	financing service		
6.6	Lack of financial, human and material management can't determine lease		
	financing service		
7	Infrastructure		
7.1	Absence of Electric and other source of Power and power interruptions		
	cant affects to get lease finance service		
7.2	Insufficient and interrupted water supply can't determine lease financing		
	service		
7.3	Lack of business development services can't determine lease financing		
	service		
7.4	Lack of sufficient and quick transportation service can't determine lease		
	financing service		
7.5	Lack of appropriate dry waste and sewerage system can't determine lease		
	financing service		
8	Banks Lease finance Requirements		
8.1	20% equity contribution by SMEs for lease financing service is affordable		
8.2	SME lease financing shall not be less than Birr 1 million is in line with		
	SMEs lease finance need.		
8.3	Lessees capital shall be in between 500,000-7.5 million is appropriate and		
	can be afforded by SMEs		
8.4	The lessee in lease financing should have to have manufacturing premises		
	either form government or rented from individual and from own premises		
	cant affect lease financings service for SMEs		

1	Effective Lending rates	Reason For choosing this scale.
1.1	Why?	
1.2	Why?	
1.3	Why?	
2	Transaction cost	
2.1	Why?	
2.2	Why?	
2.4	Why?	
2.5	Why?	
3	Firm Age	
3.1	Why?	
3.2	Why?	
3.3	Why?	
3.4	Why?	
3.5	Why?	
3.6	Why?	
4	Firm Size	
4.1	Why?	
4.2	Why?	
4.3	Why?	
4.4	Why?	
5	Industry	
5.1	Why?	
5.2	Why?	
5.3	Why?	
5.4	Why?	
6	Management	
6.1	Why?	
6.2	Why?	
6.3	Why?	
6.4	Why?	
6.5	Why?	
6.6	Why?	
7	Infrastructure	
7.1	Why?	
7.2	Why?	
7.3	Why?	
7.4	Why?	
7.5	Why?	
8	Banks Lease finance	
	Requirements	
8.1	Why?	
8.2	Why?	
8.3	Why?	
8.4	Why?	

Interview Questions

Dear Sir/Madam,

- 1. What does it mean lease financing service in Development Bank of Ethiopia, Jimma Branch context? What types of requirements shall be fulfilled by the lessees?
- 2. Could those requirements be fulfilled by SMEs under Jimma branch catchment area? If not, what are those requirements and how it could be mitigated?
- 3. What are the opportunities of lease financing service in DBE, Jimma Branch?
- 4. What are the main challenges of lease financing service in DBE, Jimma Branch?
- 5. What are the ways forwarded to tackle those challenges?
- 6. What are main challenges faced SME to be beneficiary of lease financing service of DBE, Jimma Branch?
- 7. What are the ways forwarded to tackle those challenges?
- 8. Do you have available funds/budget/Hard currency to entertain SMEs? If not, what kinds of solutions are taken at time of budget deficit/hard currency?
- 9. Lease financing policy and procedure and others rules and regulations and lease requirment issued by the Development bank of Ethiopia are suitable and workable for leasing operation? If not, what are they? How it should be mitigated?
- 10. Do you believe that the lease financing requirements (DBE), cycle time and other lease related Issues are satisfied customers?

Statistics

		Identification of the respondent SME	Age of the respondent	Gender of the respondent	Educational level of the Respondent	Years of being a member of the Enterprise	Current position in the enterprise
Ν	Valid	80	79	80	80	80	77
	Missing	0	0	0	0	0	0

Age of the respondent

	7.90 or mo respondent						
		Frequency	Percent	Valid Percent	Cumulative		
					Percent		
	Between 21-30	6	7.5	7.5	7.5		
	Between 31-40	35	43.8	43.8	51.3		
Valid	Between 41-50	37	46.3	46.3	97.5		
	>50	2	2.5	2.5	100.0		
	Total	79	100.0	100.0			

Gender of the respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	59	73.8	73.8	73.8
Valid	Female	21	26.3	26.3	100.0
	Total	80	100.0	100.0	

Educational level of the Respondent

		Frequency	Percent	Valid Percent	Cumulative Percent
	Primary Education	18	22.5	22.5	22.5
	Secondary Education	21	26.3	26.3	48.8
	Preparatory Education	13	16.3	16.3	65.0
Valid	TVET	17	21.3	21.3	86.3
	Diploma	7	8.8	8.8	95.0
	First Degree	4	5.0	5.0	100.0
	Total	80	100.0	100.0	

Years of being a member of the Enterprise

		Frequency	Percent	Valid Percent	Cumulative
					Percent
	<5	10	12.5	12.5	12.5
Valid	Between 6-10	61	76.3	76.3	88.8
valiu	Between 11-15	9	11.3	11.3	100.0
	Total	80	100.0	100.0	

Current position in the enterprise

	Current position in the enterprise							
-		Frequency	Percent	Valid Percent	Cumulative			
					Percent			
	Casher	2	6.3	6.3	6.3			
	Manager	55	68.8	68.8	75.0			
Valid	Member	17	21.3	21.3	96.3			
	Secretary	3	3.8	3.8	100.0			
	Total	77	100.0	100.0				

Regression

Variables Entered/Removed^a

Model	Variables Entered	Variables Removed	Method
1	BLFR, INFR, FIZ, IND, FIA, TRC, ELR, MANG ^b		Enter

- a. Dependent Variable: LFS
- b. All requested variables entered.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.792ª	0.627	0.585	0.64799	1.529

a. Predictors: (Constant), BLFR, INFR, FIZ, IND, FIA, TRC, ELR, MANG

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	52.879	8	6.610	17.336	.000 ^b
1	Residual	27.071	71	.381		
	Total	79.950	79			

a. Dependent Variable: LFS

Coefficients^a

Unstandardized Coefficients		Standardized Coefficients			Co linearity Statistics		
Model	В	Std. Error	Beta	t	Sig.	Tolerance	
1 (Const ant)	-3.325	0.853		-3.9	0.000		VIF
ELR	-0.188	0.131	-0.173	-1.432	0.156	0.36	2.78
TRC	TRC -0.02 0.125		-0.02	-0.163	0.871	0.356	2.808
FIA	0.069	0.114	0.047	0.604	0.548	0.874	1.145
FIZ	0.614	0.158	0.385	3.878	0.000	0.533	1.877
IND	0.432	0.12	0.265	3.592	0.000	0.965	1.037
MANG	0.083	0.14	0.065	0.595	0.554	0.443	2.255
INFR	0.347	0.091	0.296	3.831	0.000	0.877	1.14
BLFR	BLFR -0.15 0.088		-0.14	-1.709	0.000	0.783	1.276

Reliability

Reliability Statistics

Cronbach's	Cronbach's	N of Items					
Alpha	Alpha Based on						
	Standardized						
	Items						
.840	.844	41					

b. Predictors: (Constant), BLFR, INFR, FIZ, IND, FIA, TRC, ELR, MANG

Correlations

		ELR	TRC	FIA	FIZ	IND	MANG	INFR	BLFR	LFS
ELR	Pearson Correlation	1	.753**	217	205	140	212	151	052	365**
	Sig. (2-tailed)		.126	.675	.000	.490	.106	.060	.066	.032
	N	80	80	80	80	80	80	80	80	80
TRC	Pearson Correlation	.753**	1	191	253 [*]	149	036	170	015	323**
	Sig. (2-tailed)	.126		.055	.021	.001	.000	.132	.094	.006
	N	80	80	80	80	80	80	80	80	80
FIA	Pearson Correlation	217	191	1.000	.243*	.024	007	.109	143	.285*
	Sig. (2-tailed)	.675	.055		.030	.831	.950	.336	.083	.011
	N	80	80	80	80	80	80	80	80	80
FIZ	Pearson Correlation	205	253 [*]	.243*	1.000	.122	190	149	196	.593**
	Sig. (2-tailed)	.000	.021	.030		.282	.092	.187	.246	.000
	N	80	80	80	80	80	80	80	80	80
IND	Pearson Correlation	140	149	.024	.122	1.000	.270*	190	005	.369**
	Sig. (2-tailed)	.490	.001	.831	.282		.004	.091	.134	.001
	N	80	80	80	80	80	80	80	80	80
MAN	Pearson Correlation	212	036	.270*	.616**	.079	1.000	.543**	387**	.507**
G	Sig. (2-tailed)	.106	.000	.950	.092	.004		.000	.440	.001
	N	80	80	80	80	80	80	80	80	80
INFR	Pearson Correlation	151	088	.199	.191	.078	.268*	1.000	239 [*]	.479**
	Sig. (2-tailed)	.060	.132	.336	.187	.091	.000		.864	.058
	N	80	80	80	80	80	80	80	80	80
BLF	Pearson Correlation	052	015	143	196	005	387**	239 [*]	1.000	310**
R	Sig. (2-tailed)	.066	.094	.083	.246	.134	.440	.864		.014
	N	80	80	80	80	80	80	80	80	80
LFS	Pearson Correlation	365**	323**	.285*	.593**	.369**	.507**	.479**	310**	1.000
	Sig. (2-tailed)	.032	.006	.011	.000	.001	.324	.058	.014	
	N	80	80	80	80	80	80	80	80	80

^{**.} Correlation is significant at the 0.01 level (2-tailed).

^{*.} Correlation is significant at the 0.05 level (2-tailed).