

Determinants of Access to Private Project Debt Financing In Ethiopia: The Case Study of South-Western Part of Ethiopia

A Research Thesis Submitted to the School of Graduate Studies of Jimma University in Partial Fulfillment of the Requirements for the Award of Master's Degree in Project Management and Finance (MA)

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**JIMMA UNIVERSITY
COLLEGE OF BUSINESS & ECONOMICS
MA. PROGRAM IN PORJECT MANAGEMENT AND FINANCE**

***JUNE, 2020
JIMMA, ETHIOPIA***

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A Thesis Report Submitted To Business & Economics College Research & Postgraduate Coordination Offices Of Jimma University In Partial Fulfillment Of The Requirements For The Award Of The Degree Of Master Of Science In Accounting And Finance

**July, 2020
Jimma, Ethiopia**

**JIMMA UNIVERSITY
SCHOOL OF GRADUATE STUDIES**

Declaration

I declare that this thesis is my original work and has not been presented in any other university/institution for consideration of any certification. This thesis report has been complemented by referenced sources duly acknowledged. Where text, data (including spoken words), graphics, pictures or tables have been borrowed from other sources, including the internet, these are specifically accredited.

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Acknowledgement

It is really my pleasure to record my profound indebtedness to my main advisor Abel Worku (Ass. Professor) and co-advisor Monanol T. for their unreserved professional and technical guidance while preparing this thesis report.

My deepest admiration and thanks also go to my wife Kalikidan Tola and my childrens Barkot Amanuel, Dibora Amanuel and sifen Amanuel for their valuable support. Without their kind assistance this thesis report wouldn't have been processed on time.

My heart-felt thanks also goes to the officials in the various offices who in one way or the other provided me with the relevant data to prepare this project.

Last but not least, I would like to appreciate all those friends of mine who showed me their concern for my success, whose assistance have proved to be worthwhile during my stay in the university.

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Abbreviations and Acronyms

NBE	National Bank of Ethiopia
FDRE	Federal Democratic Republic of Ethiopia
SPVs	Special Purpose Vehicles
SMEs	Small and Medium Enterprise
USAID	United Nations aid for International Development
LPM	Linear Probability Model
CDF	Cumulative Distribution Function

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ABSTRACT

A well-functioning private sector plays an important role for the growth and development of a nation. The GTP of FDRE amplifies the role of private sector involvement in the growth and development of a country. Successful implementation of any project in general and private projects in particular require huge amount of finance which cannot be borne by the project promoter alone. The accessibility of project financing is the major concern for project promoter in developing nations like Ethiopia. Despite significant role of private sector in the country's economy, private projects are challenged by lack of/ limited access to project debt financing. The aim of this study, therefore, to identify determinants of access to private project debt financing in Ethiopia. These includes investigation of variables such firm specific factors and industry specific factors explaining access to private project debt financing. Regression based on bivariate probit model with sample selection using maximum-likelihood estimations has been performed on the dataset. Descriptive methods shaded additional light on the available survey. The study uncovered that business experience, manager's competency, collateral size, past credit exposure, loan term structure, structure of financial sectors, location of business, ownership status, interest rate and financial regulation significantly explains or determine access to private project debt financing. The findings of this study and studies like this could have impact further than the academic world. Policy makers and project stakeholders benefit from such information when they devise strategies to move towards a fairer and more inclusive credit sector.

Key words: *Project finance, debt financing, private project, Access to private project debt.*

CHAPTER ONE

INTRODUCTION

This chapter presents the background of the study, problem statement, purpose of the study, objectives of the study, Hypothesis formulation, significance of the study, the scope of the study, limitation and organization of the study.

1.1. BACKGROUND OF THE STUDY

It is inevitable that private sectors play paramount important role in the growth and development of a nations. A private sector is a carrier of economic growth of any country by involving highly on the industrialization process and other sectors of the economy (Paul and Fredric, 2000). The role of private sector in economic growth of a country is highly important to developing nations such as Ethiopia whose economy is still predominantly agrarian. Alemayehu (2008) argued that the role of private business in Ethiopia is becoming an instrument of employment and income generation, human development and poverty alleviation, export promotion, import substitution and entrepreneurship and hence the driving forces behind the growth of the country. Hence, private sector support and incentive mechanism must be given priority so as to enhance private sector business competitiveness to assure the country's growth.

One of the private sector businesses that highly support the country's economic growth is private project which highly demand for project stakeholder's involvement such as project promoters, contractors, financiers and so on. Especially during the current initiative to build industry led economy, the role of private investment should not be undermined.

According to Nicholas (2004) a project is a unique temporary activity involving a single, definable purpose usually specified in terms of cost, schedule, and performance requirements demanding the skill and talents from multiple professionals and organizations passing through several distinct phases, called the project life cycle. Projects by its nature require large amount of fund as opposed to other types of finance such as working capital.

Project financing as cited by Andrew Fight (2006) refers to a non-recourse or limited recourse financing structure in which debt, equity and credit enhancement are combined for the construction and operation, or the refinancing of a facility in a capital-intensive industry.

From the study findings of Ndegwa P. & Wario N. (2016) some of the factors that affect credit access were: interest rate charged by the banks, level of literacy, the number of lending institutions and the demand for collateral by banks. Whereas, Antony M. (2015) in its study focusing on demographic specific factors concluded that gender, earnings and educational level are positive and significant factors that influence access to microcredit financing.

Isabella N. (2016) in his study in Kenya, Kisii identified and concluded that Demographic factors age, sex, educational level, business experience and location of business and other factors such as interest rate, collateral, stability of bank lending, lending conditions, access to information and credit servicing history of borrower are the major factor influencing access to credit facilities by women entrepreneurs in Kenya.

Following the liberalization of economy, private sectors are highly engaged in capital intensive projects in Ethiopia. However due to lack of access or limited access to debt financing in the country, the private project sector is not growing as expected. Despite the considerable role of private sector in economic growth and development as a prolific job creator and income generator, access to finance remains the bane of their very survival. Access to credit is core to private sector development and functioning since finance constitutes the lifeblood of every business source.

Firewoini Gebreyesus (2016) concluded, in her study in capital city Addis Ababa, despite the important role private sectors played and the positive contribution they make to the overall economy, private enterprises especially SMEs are disadvantaged, and they are fondly referred to as the missing middle. Lack of access to financing on reasonable terms and conditions is probably the most serious constraint facing SMEs.

Hence, the focus of this study is, therefore, to identify the determinants that limit accessibility of private project debt financing in Ethiopia to assist the growth and improvement of private sector involvement in the growth and development of this country with reference to south Western part of Ethiopia but limited to case of Wolkite, Jimma, Agaro, Bedele, Metu, Gore and Gambella.

1.2. STATEMENT OF THE PROBLEMS

Ethiopia's growing population and rapid rate of urbanization is placing substantial pressure on expansion of private sector involvement in the growth and development of the country. In the process of private sector involvement in the country's growth, private sectors invest their equity in different projects. However due to the requirement of large amount of project capital, the need for other source of project financing is inevitable in any country in general and developing countries like Ethiopia in particular.

There are three source of project financing i.e equity financing, debt financing and miscellaneous project financing (which includes government Budget, contribution and lease). Out of the three commonly used source of project financing, debt financing is the most common and cheapest form of source of project finance as compared to the other source of finance.

Private project debt financing is the main problem for private project both from lender and borrower perspectives. This is due to regulatory organ restrictions, liquidity problem, risk of default, lack of information about potential borrower, financial institution bureaucracy, requirement of collateral and so on.

In Ethiopia, it was only through the state-owned Development Bank of Ethiopia and commercial Bank of Ethiopia that project financing was principally undertaken in the country. However, after NBE directive No SBB/43/2008 which necessitated diversification of the loan portfolio and in an intention to participate and assist in the overall development of the country in general and capital investment projects in particular, all private commercial Banks are now involved in facilitating loans to small and medium and large-scale projects (Getachew Argaw, (2016).

In spite of all the above fact, a number of obstacles and challenges have continued to constrain access to private project debt financing in Ethiopia. Hence, the study, therefore, aimed to seek to ascertain the determinants of access to private project debt financing as an approach for accelerating the growth and improvement of private sector debt financing in Ethiopia with special attention to the south Western part of the country.

Different researchers try to study about access to finance and challenges of private sector in Ethiopia. Firewoini (2016) in her study assess and evaluate access to finance that private

enterprises in Ethiopia are having and the factors that hinder them not to properly raise funds. She tries to review Ethiopian financial sector and the barriers faced by private sectors in accessing adequate finance and identify the policy and regulatory issues that determine access to finance for private sectors engagement. She concluded that despite important role of private sectors play and the positive contribution they make to the overall economy, they are disadvantaged-lack of access to financing on reasonable terms and conditions is probably the most serious constraint facing SME's. But her study is only limited to capital city, i.e Addis Ababa.

Obse M.(2015) concluded that that age, gender, education of the household head along with the size and location of the household influenced the households' fate in the credit market in Ethiopia. However, Abi Kedir, (2003) found geographical location of households, current household resources, schooling of the household head, value of assets, collateral, number of dependants, marital status and outstanding debt as significant factors determining access to credit in urban Ethiopia.

There are also many similar researches like Alex R (2013), Fatoki, O. & Smith A. (2011), Ndegwa P. & Wario N. (2016) and other tries to address similar issues but almost all of the study was conducted outside Ethiopia. This study, therefore, tries to fill this gap in studying the case to south Western part of Ethiopia for which no similar study is not yet conducted in the area for the specified objectives.

1.3. RESEARCH QUESTIONS

The study is designed to seek answers for the following research questions. These are:

1. What are firm specific determining factors and their impact on access to private project debt financing?
2. What are Industry specific determining factors and their impact on access to private project debt financing?

1.4. OBJECTIVES OF THE STUDY

1.4.1. GENERAL OBJECTIVE

The primary objective of the study is to examine the determinants of access to private project debt financing in south Western Ethiopia.

1.4.2. SPECIFIC OBJECTIVES

Specific objective of the study includes:

- To investigate the impact of firm specific factors (i.e Cost of debt, past credit exposure, business size capital structure, collateral size, location, business experience, loan term structure, ownership status and management competency) on access to private project debt financing.
- To examine the effect of industry specific factors (i.e. financial regulation, structure of financial sector) on access to private project debt financing.

1.5. HYPOTHESIS OF THE STUDY

Hypotheses are predictions about the outcome of the results to be estimated and tested. Hence, the study tried to test the following hypotheses:

Ha₁: Financial regulation has positive significant impact on access to private project debt financing.

Ha₂: Interest rate has positive impact on access to private project debt financing.

Ha₃: Business size has positive impact on access to private project debt financing.

Ha₄: Credit exposure has positive impact on access to project debt financing.

Ha₅: Project loan term has positive impact on access to private project debt financing.

Ha₆: The size of collateral offered to back the loan has positive impact on access to project debt financing.

Ha₇: The location of private project has a positive impact on access to project debt financing.

Ha₈: Structure of financial sector significantly affects debt financing access by private investors.

Ha₉: Business experience has positive impact on access to project debt financing.

Ha₁₀: Legal status and type's business formation affect accessibility of private project debt financing.

Ha₁₁: Management competency has positive impact on access to project debt finance.

1.6. SIGNIFICANCE OF THE STUDY

The growth and development of any nation will not be realized unless private investment encouraged to participate in the process. The government of FDRE recognizes the importance of private sector and its potential to contribute to long-term economic development. Consequently, it has been taking steps to tackle current problems which hinder private sector investment in the country. The study built on these efforts and formulated recommendations for improving access to long term private project debt financing in the country. In addition, the study findings will assist decision makers who engaged in design and implementation of private sector participation strategy to be able to better see the challenges faced by private sector in accessing project financing in the country towards creating conducive access to project finance environment.

The study will also supportive for financial institution and private investors to clearly understand what factors contribute for success project financing and what hinder their process in granting and accessing the long-term project financing and helps them to formulate strategies for alienating those challenges for ease of access of debt financing. Furthermore, the study opens the chance to other researchers to conduct study on similar issues not covered by this study.

1.7. SCOPE OF THE STUDY

It is clearly understood that there are many factors that may affect access to private project debt financing. However, this study is limited to major factors that contribute significant impact on access to private project debt financing. For ease of data collection, accessibility of secondary data, geographical location of study area, the study limited to case of Wolkite, Jimma, Agaro, Bedele, Metu, Gore and Gambella and will not cover the country as a whole. The study established factors that influence debt financing accessibility by private project debt financing in Ethiopia. It brings correlations between various debt financing determinant required by lenders and the ease of access to debt financing as perceived by private investors.

1.8. LIMITATION OF THE STUDY

The limitation of the study lies in difficulty of collecting data from different sources due to prevalence of COVID-19 pandemic which challenges the data collection process. Due to similar cases the difficulty faced in reviewing different literature from different source are tried to overcome by reviewing web-based sources though it is not enough for the study as the case was not well studied before. Due to geographical scatterdness of financial institutions branches, time and cost constraints, the study is only to address the issue in the South-Western part of Ethiopia limited to Wolkite, Jimma, Agaro, Bedele, Metu, Gore and Gambella towns.

1.9. ORGANIZATION OF THE STUDY

The entire research begins with the first chapter on the background and introduction of the study, defines the research problems and research questions including the objective of the study, scope and limitations of the study and the significance of the study. Chapter two presents review related literature on the theoretical framework and empirical study on access to private project debt financing. The third chapter address the research methodology adopted by the research. Chapter four deals with result and discussion, and summary of findings. Finally, the fifth chapter presents the findings of the study conclusions and recommendations.

CHAPTER TWO
REVIEW OF RELATED LITERATURE
2.1. THEORETICAL LITERATURE
2.1.1. THE CONCEPTS OF PROJECT

According to Kerzner (1998), a project is: “...any series of activities and tasks that have a specific objective to be completed within certain specifications, have defined start and end dates, have funding limits (if applicable) and consume resources (i.e., money, people, equipment).”

International Project Finance Association defines project finance as “*the financing of long-term infrastructure, industrial projects and public services based upon a non-recourse or limited recourse financial structure where project debt and equity used to finance the project are paid back from the cash flow generated by the project*”. Even though the definition limits the term to specific economic unit, one can understand from this definition that the project require large investment and limited or nonrecourse debt.

A project is a temporary undertaking performed to produce a unique product, service, or result consisting of three components. These are specific scope, schedule and require resources. Each component affects the other two. For example: Expanding the type and characteristics of desired outcomes may require more time (a later end date) or more resources. Moving up the end date may necessitate paring down the results or increasing project expenditures (for instance, by paying overtime to project staff). Within this three-part project definition, you perform work to achieve your desired results (Stanley E. Potny, PMP, 2010).

2.1.2. PROJECT FINANCING

Project finance is generally used to refer to a non-recourse or limited-recourse financing structure in which debt, equity and credit enhancement are combined for the construction and operation, or the refinancing, of a facility in a capital-intensive industry (Andrew Fight, 2006).

2.1.3. SOURCE OF PROJECT FINANCING

Raising financing depends on the nature and structure of the project financing being proposed. Lenders and investors will vary depending on these goals and risks related to the financing. Commercial lenders seek projects with predictable political and economic risks. Multilateral institutions, on the other hand, will be less concerned with commercial lending criteria and will look towards projects that ostensibly satisfy not only purely commercial criteria (Andrew Fight, 2006).

Projects are financed from three most common forms of source of financing. This includes:

- A. **Debt financing:** These are source of finance obtained from borrowing from financial institutions, corporate bond, and customer deposit or trade debt.
- B. **Equity Financing:** is type of project financing obtained from project promoters or stockholders' own source.
- C. **Other Source of Finance:** this is source of finance from donation, contributions & so on.

2.1.4. PROJECT DEBT FINANCING

There are essentially four types of debt financing: borrowings, corporate bonds, trade debt, and customer deposit. The most common types of debt financing is borrowing from financial institutions, such as banks or leasing companies. Borrowing from financial institution is the most common, quick and relatively inexpensive form of project financing. (Kevin R. Callahan and et al, 2007)

Financial sectors play a critical role for the growth and development of a country. One of the financial institutions that play an intermediation function by mobilizing money from those who have excess fund and lend it to others who need it for their investment are Banks. As a result, providing credit to borrowers is one means of which Banks contribute to the growth of economy, thereby ensuring that the money available in economy is used for productive and fertile project purpose which can stimulate the economy as well.

The cost associated with securing and closing debt financing are tax deductible over the life of the financing and makes this type of financing cheaper than other form of financing.

2.1.5. CHARACTERISTICS OF PROJECT FINANCING

Project financing has different characteristics from other financing. Esty, 2002 characterize project financing as follows:

Capital-Intensive: Project financing tends to be large-scale projects that require a great deal of debt and equity capital.

Highly leveraged: These transactions tend to be highly leveraged with debt accounting for usually 65% to 80% of capital in relative normal case.

Long Term: The tenor for project financing can be easily reach 10 to 20 years.

Independent entity with a finite life: Project financing frequently relies on a newly established legal entity, known as the project company, which has the sole purpose of executing the project and which has a finite life.

Non-recourse or limited recourse financing: The project company is the borrower. Since these newly formed entities do not have their own credit or operating histories, it is necessary for lenders to focus on the specific project's cash flow.

Controlled dividend policy: To support a borrower without a credit history in a highly leveraged project with significant debt service obligations, lenders demand receiving cash flows from the project as they are generated. The project's income goes to servicing the debt, covering operating expenses and generating a return on the investors' equity. Due to the nature of such contractually binding arrangement, the re-investment decision is removed from management's hands.

Many Participants: These transactions frequently demand the participation of numerous participants.

Allocated Risk: Because many risks are present in such transactions, often the crucial element required to make the project go forward is the proper allocation of risk. This

allocation is achieved and codified in the contractual arrangements between the project company and the other participants.

Costly: raising capital through project financing is generally costlier than through typical corporate finance avenues. The greater need for information, monitoring and contractual agreements increases the transaction cost. Furthermore, the highly-specific nature of the financial structures also entails higher costs and can reduce the liquidity of the project's debt.

2.1.6. PROS AND CONS OF PROJECT DEBT FINANCING

Majority of Project Management and finance books and journals outlined the following advantage and disadvantages of project financing from different perspectives.

2.1.6.1. PROS OF PROJECT DEBT FINANCING

- A) **Non-recourse/limited recourse financing** Non-recourse project financing does not impose any obligation to guarantee the repayment of the project debt on the project sponsor. This is important because capital adequacy requirements and credit ratings mean that assuming financial commitments to a large project may adversely impact the company's financial structure and credit rating (and ability to access funds in the capital markets).
- B) **Off balance sheet debt treatment:** The main reason for choosing project finance is to isolate the risk of the project, taking it off balance sheet so that project failure does not damage the owner's financial condition. This may be motivated by genuine economic arguments such as maintaining existing financial ratios and credit ratings. Theoretically, therefore, the project sponsor may retain some real financial risk in the project as a motivating factor, however, the off-balance sheet treatment per se will effectively not affect the company's investment rating by credit rating analysts.
- C) **Leveraged debt:** Debt is advantageous for project finance sponsors in that share issues (and equity dilution) can be avoided. Furthermore, equity requirements for projects in developing countries are influenced by many factors, including the country, the project

economics, whether any other project participants invest equity in the project, and the eagerness for banks to win the project finance business.

- D) **Avoidance of restrictive covenants in other transactions:** Because the project financed is separate and distinct from other operations and projects of the sponsor, existing restrictive covenants do not typically apply to the project financing. A project finance structure permits a project sponsor to avoid restrictive covenants, such as debt coverage ratios and provisions that cross-default for a failure to pay debt, in the existing loan agreements and indentures at the project sponsor level.
- E) **Favorable tax treatment:** Project finance is often driven by tax efficient considerations. Tax allowances and tax breaks for capital investments etc. can stimulate the adoption of project finance. Projects that contract to provide a service to a state entity can use these tax breaks (or subsidies) to inflate the profitability of such ventures.
- F) **Favorable financing terms:** Project financing structures can enhance the credit risk profile and therefore obtain more favorable pricing than that obtained purely from the project sponsor's credit risk profile.
- G) **Political risk diversification:** Establishing SPVs (special purpose vehicles) for projects in specific countries quarantines the project risks and shields the sponsor (or the sponsor's other projects) from adverse developments.
- H) **Risk sharing:** Allocating risks in a project finance structure enables the sponsor to spread risks over all the project participants, including the lender. The diffusion of risk can improve the possibility of project success since each project participant accepts certain risks; however, the multiplicity of participating entities can result in increased costs which must be borne by the sponsor and passed on to the end consumer –often consumers that would be better served by public services.
- I) **Collateral limited to project assets** Non-recourse project finance loans are based on the premise that collateral comes only from the project assets. While this is generally the case, limited recourse to the assets of the project sponsor is sometimes required as a way of incentivizing the sponsor.

J) **Lenders are more likely to participate in a workout than foreclose:** The non-recourse or limited recourse nature of project finance means that collateral (a half-completed factory) has limited value in a liquidation scenario. Therefore, if the project is experiencing difficulties, the best chance of success lies in finding a workout solution rather than foreclosing. Lenders will therefore more likely cooperate in a workout scenario to minimize losses.

2.1.6.2. CONS OF PROJECT DEBT FINANCING

A) **Complexity of risk allocation:** Project financings are complex transactions involving many participants with diverse interests. This results in conflicts of interest on risk allocation amongst the participants and protracted negotiations and increased costs to compensate third parties for accepting risks.

B) **Increased lender risk:** Since banks are not equity risk takers, the means available to enhance the credit risk to acceptable levels are limited, which results in higher prices. This also necessitates expensive processes of due diligence conducted by lawyers, engineers and other specialized consultants.

C) **Higher interest rates and fees:** Interest rates on project financings may be higher than on direct loans made to the project sponsor since the transaction structure is complex and the loan documentation lengthy. Project finance is generally more expensive than classic lending because of:

- the time spent by lenders, technical experts and lawyers to evaluate the project and draft complex loan documentation;
- the increased insurance cover, particularly political risk cover;
- the costs of hiring technical experts to monitor the progress of the project and compliance with loan covenant;
- the charges made by the lenders and other parties for assuming additional risks.

- D) Lender supervision:** In order to protect themselves, lenders will want to closely supervise the management and operations of the project (whilst at the same time avoiding any liability associated with excessive interference in the project). This supervision includes site visits by lender's engineers and consultants, construction reviews, and monitoring construction progress and technical performance, as well as financial covenants to ensure funds are not diverted from the project. This lender supervision is to ensure that the project proceeds as planned, since the main value of the project is cash flow via successful operation.
- E) Lender reporting requirements:** Lenders will require that the project company provides a steady stream of financial and technical information to enable them to monitor the project's progress. Such reporting includes financial statements, interim statements, reports on technical progress, delays and the corrective measures adopted, and various notices such as events of default.
- F) Increased insurance coverage:** The non-recourse nature of project finance means that risks need to be mitigated. Some of this risk can be mitigated via insurance available at commercially acceptable rates. This however can greatly increase costs, which, raises other risk issues such as pricing and successful syndication.
- G) Transaction costs may outweigh the benefits:** The complexity of the project financing arrangement can result in a transaction whose costs are so great as to offset the advantages of the project financing structure. The time-consuming nature of negotiations amongst various parties and government bodies, restrictive covenants, and limited control of project assets, and burgeoning legal costs may all work together to render the transaction unfeasible.

2.1.7. THEORIES

2.1.7.1. AGENCY COST THEORY

Agency cost theory focuses on the costs which are created due to conflicts of interest between shareholders, managers and debt holders. For small firms, agency conflicts between shareholders and lenders may be particularly severe. Small firms are likely to have more concentrated ownership and generally, the shareholders often run the firm which decreases the conflict of interest between shareholders and managers. Therefore, no or few agency problems will exist. As a result of that, the lower the agency problem, the less debt the small firms have in their capital structure (Ang, 1992 and Jensen, 1976 cited in Ndegwa Patriciah and Wario N, 2016).

2.1.7.2. GRAMEEN BANK THEORY

According to the Grameen bank theory institutions should consider a mechanism under which credit can be provided to the poorest of the poor on a group liability basis instead of any collateral. Based on this principle, over the last decade, the bank has been successfully operating with an unprecedented loan recovery rate. Grameen Bank is founded on the principle that loans are better than charity to interrupt poverty: they offer people the opportunity to take initiatives in business or agriculture, which provide earnings and enable them to pay off the debt. The bank is founded on the belief that people have endless potential, and unleashing their creativity and initiative helps them end poverty. Grameen has offered credit to classes of people formerly underserved: the poor, women, illiterate, and unemployed people. Access to credit is based on reasonable terms, such as the group lending system and weekly-installment payments, with reasonably long terms of loans, enabling the poor to build on their existing skills to earn better income in each cycle of loans (Polgreen et al., 2011 cited in Ndegwa Patriciah and Wario N, 2016).

Grameen's objective has been to promote financial independence among the poor. The theory states that micro-credit loans are based on the concept that the poor have skills that are under-utilized, and, with incentive, they can earn more money. A group-based credit approach is applied to use peer-pressure within a group to ensure the borrowers follow through and conduct

their financial affairs with discipline, ensuring repayment and allowing the borrowers to develop good credit standing. The bank also accepts deposits, provides other services, and runs several development-oriented businesses including fabric, telephone and energy companies. The bank's credit policy to support under-served populations has led to the overwhelming majority (96%) of its borrowers being women (Glenn, 2006, cited in NdegwaPatriciah and Wario N, 2016).

2.1.7.3. PECKING ORDER THEORY

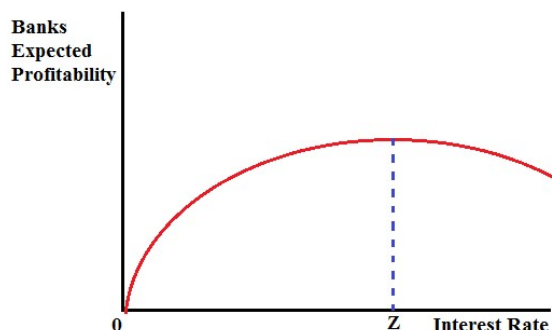
According to Pecking Order Theory capital structure is driven by firm's desire to finance new investments, first internally, then with low-risk debt, and finally if all fails, with equity. Therefore, the firms prefer internal financing to external financing (Myers and Majluf, 1984 cited in Ndegwa Patriciah and Wario N, 2016). This theory is applicable for large firms as well as small firms. Since small firms are opaque and have important adverse selection problems that are explained by credit rationing; they bear high information costs (Psillaki, 1995, cited in NdegwaPatriciah and Wario N, 2016). Since the quality of small firms' financial statements vary, small firms usually have higher levels of asymmetric information. Even though investors may prefer audited financial statements, small firms may want to avoid these costs (Pettit and Singer, 1985 as cited in NdegwaPatriciah and Wario N, 2016). Therefore, when issuing new capital, those costs are very high, but for internal funds, costs can be considered as none. For debt, the costs are in an intermediate position between equity and internal funds. As a result, firms prefer first internal financing (retained earnings), then debt, and they choose equity as a last resort (Pettit and Singer, 1985 cited in NdegwaPatriciah and Wario N, 2016).

2.1.7.4. THE ADVERSE SELECTION THEORY

The adverse selection theory of credit markets originates with the paper by Stiglitz and Weiss (1981) in which they explained why the interest rate could not equate the supply and demand in the credit market. As discussed by Stiglitz and Weiss (1981), borrowers have inside information about the nature of the project they want financed and may reap substantial rewards from talking up their projects. Moreover, while the lender gains if the loan is repaid with interest, it is not a beneficiary of any upside gain in the firm's performance; it is, however, a victim of any downside losses in the case of default. Lenders like banks, therefore, face difficulties in

discriminating between good and bad credit risks and simply increasing the price of credit to all potential borrowers can lead to adverse selection; rather than driving potential non players out of the market, there may be systematic reasons why some of the highest risk firms are those willing to pay high interest rates (Pollard, 2003 cited in NdegwaPatriciah and Wario N, 2016). As interest rate shoot, low-risk borrowers are discouraged from borrowing and, therefore, will leave the pool of loan applicants. When the lending rate rises, low-risk borrowers will no longer apply for credit because they have already lost interest for the loan. Increase in interest rate generates two opposite effects on the profitability of banks. The first effect is negative: increase in interest rates increases the bank's risk portfolio. The second effect is positive which is brought about by the increase in the net interest income. In such a scenario, at the quoted interest rate, demand for credit may exceed the supply. The phenomenon is known as equilibrium credit rationing (Bellier, Sayeh and Serve, 2012 cited in Antoney M. W, 2017). The implication of that supply of loan is an inverse function of the interest rate. The initial rise in the interest rate may increase the supply of loanable funds as it increases the expected profitability of the bank. Nevertheless, the two do not have a monotonic relationship. Beyond a certain point, with increase in interest rates, expected profitability of the bank increases but at declining rate up to an optimal point where the profitability falls as interest rate rises (figure 1 below). Point Z is the equilibrium point. However, at this point an excess demand for credit may persist, causing interest rates to rise further. Consequently, a higher profitability is expected by bankers. Contrary to expectations, banks refuse to advance loans beyond this equilibrium point because doing so will lead to a fall in banks' expected profitability. Therefore, banks will not lend beyond the equilibrium point even if there is an increase in either interest rate or excess demand for loans in the market.

Figure 2.1. There exists an interest rate which maximizes the expected return to the bank.



2.1.7.5. THE MORAL HAZARD THEORY

Moral hazard is captured in what stglitz and weiss referred to as the incentive effect. The incentive effect suggests that because higher interest rate reduces the successful projects expected net return, borrowers may be forced to switch from the low risk projects to high risk projects; where there is a low probability of success but the expected return will be higher in case the projects do not fail. As interest rates shoot, low risk borrowers are discouraged from borrowing and therefore will leave the pool of loan applicants.

Moral hazard concerns the risk that arises because of the behavior of the borrower after the contract is made. After an entrepreneur successfully borrows a loan to finance a new investment project, the probability of its success may be highly determined by the entrepreneurial efforts; which a bank is unable to monitor directly. To encourage such hidden efforts, there is a need for the borrower to anticipate substantial profit from his venture's success (moral hazard rents). Consequently, this need to allow entrepreneurs to keep enough profit from their successful investments can impose an upper limit on the rates of interest that banks can charge (interest rate ceiling). As a result, rise in interest rates might not occur even when there is excess demand for funds by qualified borrowers. Borrowers end up getting less credit amount than they applied for or none at all (Myerson, 2012 as cited in Antoney M, 2017)

2.1.7.6. INFORMATION THEORIES OF CREDIT

Information theories of credit shows that the amount of credit to firms and individuals would be larger if financial institutions could better predict the probability of repayment by their potential customers. Therefore, the more banks know about the credit history of prospective borrowers, the deeper credit markets would be. Public or private credit registries that collect and provide broad information to financial institutions on the repayment history of potential clients are crucial for deepening credit markets. The information that each party to a credit transaction brings to the exchange will have important implications for the nature of credit contracts; the ability of credit markets to match borrowers and lenders efficiently and the role played by the rate of interest in allocating credit among borrowers.

2.1.7.7. THE “AVAILABILITY DOCTRINE.”

The availability doctrine attempts to give an alternative explanation to the working of the monetary policy work in the presence of interest inelastic investors. According to this theory, lending by banks is limited to availability of funds. The amount of funds that banks can attract determines the volume of loans that they can avail to the demanders of loanable funds. This supply constraint, therefore, results to credit rationing. Consequently, equilibrium in the credit market is purely determined by the supply conditions and real economic activities (Antoney M., 2017).

2.2. EMPIRICAL LITERATURE

2.2.1. FACTORS AFFECTING ACCESS TO PROJECT FINANCING

Beck (2007) identified that the regulatory organ policy is one of the drivers for access of finance and the weaknesses in financial and legal system is one of the obstacles in accessing finance products in developing countries as local government has actually the entire responsibility to build institutions.

It has been remarked that interest rates charged by banks in Sub-Saharan Africa create disincentives for most borrowers to acquire funds to invest in their businesses on one hand. On the other hand, the interest rates charged by banks discourage most small businesses from applying for bank financing (Diagne and Zeller, 2002; Foltz, 2004). Fatoki and Smit (2011) in South Africa grouped the major factors that influence the low access to finance by SMEs in two ways; internal and external. The internal factors include the business information, collateral, networking, and managerial competences. External factors constitute the legal environment, crime and corruption, ethical perceptions, and macro-economy.

Financial institutions requirement of collateral to back the debt is one of the obstacles to access the debt. Collateral refers to the extent to which assets are committed by borrowers to a lender as security for debt payment (Gitman, 2003). The security assets should be used to recover the principal in case of default.

Larger firms have higher access to debt financing than smaller and medium sized firms because of economies of scale. Therefore, larger firms find easier to borrow money from financial institutions for expansion thereby enjoy the economies of scale which SMEs can't. Larger firm also manage to purchase in large scale material and factors of production such as capital, land, equipment, and machinery as well as employing qualified workers who will ultimately increase productivity and profitability while SMEs can't as they are referred as risk borrowers by lenders (Alex Reuben Kira, 2013).

According to William (2007), no rational lender wants to or will turn over many to a borrower to manage and expend in a business or venture in which the person has no or very limited experience. This measure for successful borrowing should be easy to see from both the lender and borrower's point of view. Lenders need to be more certain that the person or persons borrowing the funds have the experience and expertise to manage the money in the day to day the business is conducted in a careful manner.

A firm's size is usually related to its age as these variables tend to have similar and possibly stronger influence on the firm's life cycle, especially in the financial decision-making process, noting that banks tend to issue more credit to large firms as compared to smaller firms. Again, conclude that there is a positive correlation between the size and banks' willingness to provide credits. Likewise, observed that large firms in Ghana were more favored by banks than small and medium-scale firms in terms of loan processing.

With respect to age, start-ups and firms less than four or five years depended more on informal financing sources than on bank loan. Supported this assertion by observing that SMEs established more than five years have a far better chance to be successful in their credit applications compared with SMEs established for less than five years. Using data from African countries, corroborate the above findings that older firms are more likely to have a formal loan than their younger counterparts. In Ghana, a study by concluded the significant positive effect of firm age on the ability to access external finance (Cassar, 2004, Quainoo, 2011, Fatoki and Asah, 2011, Beck and Cull, 2014, Klapper et al, 2006, Isaac Mwita, and Saidimu, 2012 and Quartey, 2003 cited in Nyanzu, Frederick and Quaidoo, matthew, 2017).

Fatoki & Asah (2011) and Abor (2008) concluded that the geographical area where a firm is in the proximity of banks is believed to have influence on the firm's ability to gain external finance (Berger Udel, 2006). Small and medium enterprise located outside major cities face greater difficulties in acquiring external finance, especially long-term debt as compared with their counterparts operating in cities. In the same vein, SMEs close to their banks provide relationship advantage than their counterpart SMEs elsewhere.

BrownBridge (2002) noted that loan term places an important element when it comes to lending issues. The loan term affects the revenue of lending institutions (banks), the repayment schedule of credit applicants, the financial cost of customers, and the sustainability of the use of the finance products. It is further stated that in most cases the loan period and the size present obstacles for accessing bank financing and the interest rate affects access to finance in some few cases. Several studies (Kaufmann and Wilhelm, 2006; World Bank, 2003; USAID, 2005; USAID, 2007) found that the major problems concerning access to finance for small businesses in Mozambique are basically related with the high interest rate charged on financial products and the inefficient banking services than would be justified by economic reasons. Thus, interest rates in Mozambique are at higher levels compared to other Sub-Saharan African countries. Furthermore, the differences in interest rates vary based on the currencies. The loans made on the domestic currency Metical (MZN) carry higher interest rates than those made in US dollar (USAID, 2007).

Structure of financial sector Competition in the financial sector is more important particularly for the cost of services and products in the banking industry. Furthermore, the level of competition in the financial sector provides and determines the price of financial products and the level of access to finance by small businesses (Thorsten and Maksimovic, 2003). The direct competition in the banking industry may impact on the growth of new firms and younger firms. If there is low competition, this will undermine the overall stability of the banking industry.

Ability to obtain funding depends on fulfilling financing requirements and applicant eligibility (Riding *et al.* 2007). For example, finance institutions require a viable, future project cash flow for loan repayments (Yescombe 2007). The financiers need to have evidence of borrower's ability to pay because they face additional risks from highly leveraged projects, and there is no

guarantee that the loan will be re-paid if the project is a failure (Engel *et al.* 2014). The financiers are also concerned that the project will be implemented as a concession agreement after getting the loan. According to Painter and Gallo (2012), there is a risk that the project will not generate enough income for loan repayment, which may be caused by project delays or overbudget; completed projects do not work properly as planned; revenue generated is less than projected and increased operational and maintenance costs

Abdulsaleh (2013) determined that access to debt finance was particularly more important for establishing smaller businesses such as retail businesses, and for the expansion of small businesses into medium-sized enterprises. Abdulsaleh postulated that the growth and development of existing businesses would consequently boost the national economic growth of any country.

The World Bank unfortunately also references that the cost of operating these businesses remains high in general and as such Sub-Saharan Africa is still ranked as the region in the world where it is most difficult to do business. However, the business environment in several African countries has improved substantially over the last decade (World Bank, 2011). Moreover, the study of Beck (2007) identified that the weaknesses in financial and legal systems present, in the developing countries, an obstacle in accessing finance products. When Beck analyzed 70 developing countries, he concluded that the local government has the entire responsibility to build institutions. Market activities should be undertaken in friendly manner in order to provide a proper regulatory framework to reduce financial constraints by SMEs. Some studies (Bigsten, 2003; Yitayal, 2004), with the focus on the developing countries, observed that the lack of collateral requirements, high risks, information asymmetries, small credit transactions particularly of rural households, and the distance between lender-borrowers as the main causes for credit variation among the different and existent sources of credit. In addition, the same researchers state that the policy and the type of financial institution in one or in other way determine access to finance.

The form of business of the promoter is one of the factors that affect the capital structure decision of Ghanaian SMEs. It is concluded that the ownership structure and the type of firm were found to have a significant impact on financing. Incorporation may be perceived by banks

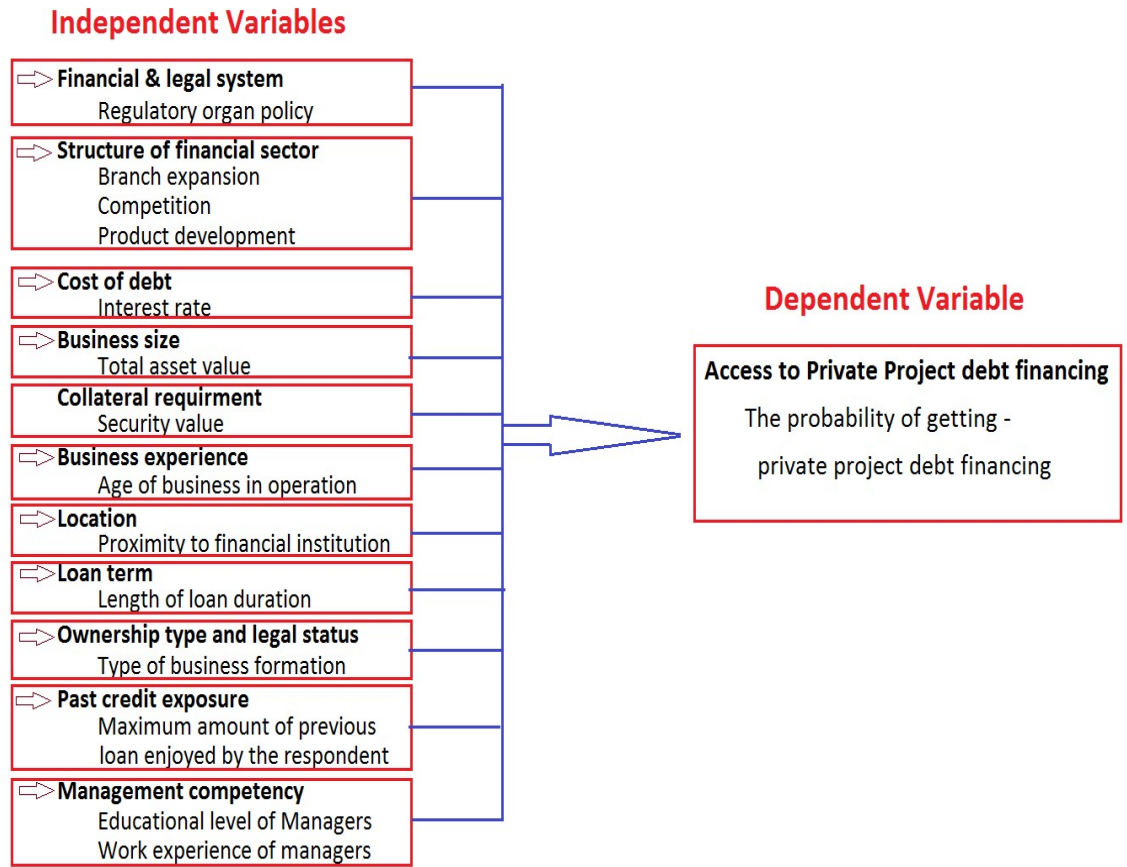
and other finance suppliers as an encouraging sign of the firm's formality and creditability. In the other hand, limited private companies are more likely to be reliant on bank financing (Abor, 2008, Cassar, 2004 and Storey, 1994 cited in Frederick N. & Matthew Q (2017).

Credit servicing history is a crucial dimension of establishing credit worth of an individual client; such that most of the times, commercial lending institutions seek this information in the course of making decision on loaning abilities (Isabella Nyomenda, 2016). Credit rating by the commercial banks in their decision to determine how much loan to award applicants, credit history was considered the most significant factor, and this explains why banks statements are currently perceived as the most valuable loaning document (Ndegwa, 2012 as cited in Isabella Nyomenda, 2016).

Owner manager's capabilities to be attributed by education and experience influences firms access to debt finance (Alex Reuben Kira, 2013). Management skills and education are needed to run a business and financial institutions confidence on the business will be enhanced if and only if there are competent and well experienced management lead the business as it is believed that the success rate of any business increases with the level of competency and experience of the manager.

2.2.2. CONCEPTUAL FRAMEWORK

The conceptual frame work explains the underlying process, which will be applied to guide and helps to answer the research objectives and research questions of this study. Based on the findings in the theoretical and empirical literature review, the following conceptual model can be drawn. Accordingly, private project debt financing in most case can be influenced by financial and legal system, Structure of financial sector, interest rate, collateral requirement, business size and age, location, loan term, ownership type and legal status, gender and business sector. Hence those variables' will be utilized as independent variable to explain the dependent variable that is access to private project debt financing.



Source: Ndegwa P. & Dr Wario, (2016), Isabella, Nyomenda (2016), modified by researcher

Figure 2.2: Conceptual Frame Work

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1. RESEARCH DESIGN

The study used descriptive research design to carry out the research based on the objectives of the study and availability of relevant data. To comply with the objective of the study, it primarily based on descriptive and quantitative research, to describe and analyze the response from interview questions and to construct an econometric model to identify and measure the effect of determinant of accessibility of private project debt financing respectively.

3.2. Data types, source and Collection Methods

Primary data is used for the study which was collected by using structured questionnaire designed for the purpose responded by selected sample respondent of private investors and bank professionals engaged in credit process. Furthermore, secondary data from different sources are used that directly and indirectly help to conduct the study.

3.3. TARGET POPULATION, SAMPLING TECHNIQUES AND SAMPLE SIZE

3.3.1. TARGET POPULATION

The target population for data collection was private investors who engaged in different business line resides in the study area including Hotel business, real estate business, agricultural projects, service sectors such as school, health centers and so on. Due to Covid-19 pandemic disease, different governmental offices are closed and/or working with limited manpower. Hence, the collection of data from Ministry of trade and market development is conducted via telephone. Accordingly, the total target population of the study is 15,155 private business owners with their respective study area proportion as per the following table.

Table 3.1: Target population

Study Area	Target Population*	%
Wolkite	1590	10%
Jimma	3735	25%
Agaro	1260	8%
Bedele	2226	15%
Metu	2219	15%
Gore	1115	7%
Gambella	3010	20%
Total	15155	100%

Source: Trade & Market Development office of respective town collected via telephone due to Covid 19 incidence.

3.3.2. SAMPLING TECHNIQUES

Convenient sampling techniques were adopted for collection of data due to geographical scatteredness of Bank branches and availability and proximity of respondents to the researcher. Furthermore, as the study address the accessibility of debt financing, researcher use convenient sampling from investors successfully enjoyed debt financing and those investors whose request for debt financing was rejected by financial institutions due to various reasons. In order to address both groups of respondents list of private business owners for the two groups were collected from financial institution and contacted to fill the questionnaire.

3.3.3. SAMPLE SIZE

Sample respondents were determined systematically using the proportion method to determine the proper sample size which may represents the overall population.

$$n = \frac{Z^2 pq}{e^2}$$

Where,

n: proposed sample respondents

Z: Level of confidence interval at 95%; i.e. ~1.96

p: Estimated proportion of sample respondents accessed project finance (30% based on pilot survey conducted by researcher on selected private project owners)

q: Estimated proportion of sample respondents failed to access project debt finance(70%)

E²: Standard Error

$$n = \frac{(1.96)^2(0.70)(0.30)}{(0.05)^2}$$

$$\mathbf{n=320}$$

The determined sample size was distributed to the study area by proportionate allocation; 10% from Wolkite, 25% from Jimma, 8% from Agaro, 15% from Bedele, 15% from Metu, 7% from Gore and 20% from Gambella town as per percentage share of respective town from the total population of the study as it is depicted in Table 3.1 above.

Table 3.2: Sample size

Study Area	Target Population*	%age Share	Sample respondents
Wolkite	1590	10%	34
Jimma	3735	25%	79
Agaro	1260	8%	27
Bedele	2226	15%	47
Metu	2219	15%	47
Gore	1115	7%	24
Gambella	3010	20%	64
Total	15155	100%	320

3.4. Data analysis and interpretation

The study used descriptive statistics, and econometrics (inferential) analysis method using software known as STATA. The nature of dependent variable resembles to dichotomous response type. Binary response regression model is used when the dependent variable is binary. Various probability model (i.e Linear probability model (LPM), probit, logit and tobit) have been used extensively to empirically model the determinants of access to project debt financing. The dependent variable, access to project debt financing, is assigned a value 1 if there is access and 0 otherwise. The binary response model is derived from an underlying latent variable model (Wooldridge & Weeks, 2002). Probit regression analysis model is applied to measure the effect of independent variable on dependent variable. The probit model limits the probability value of dependent variables between 0 and 1. The probit model is applied for the study because it is simple to estimate the probability of each explaining variables to influence the dependent variable using the cumulative distribution function (CDF). Another reason for choosing binary probit model is chosen from other similar models such as linear probability and logit models is that Linear Probability Model (LPM) is plagued by several problems such as non-normality and heteroscedasticity of the error term, possibility of the dependent variable laying outside the 0-1 range most importantly it assumes that the mean value of the dependent variable is linearly related with the explanatory variable. That is the marginal effect of the explanatory variable is remaining constant throughout, which seems patently unrealistic (Gujarati, 1995). Moreover, it is more helpful to determine the marginal effects of coefficients on the dependent variables.

3.4.1. DESCRIPTIVE STATISTICS

The descriptive statistics showed that the mean of all independent variable with respect to dependent variable.

3.4.2. ECONOMETRIC DATA ANALYSIS

The study tries to identify factors that influence the chance to get private project debt financing. Under this research works the researcher reviews the relationship between the dependent variables with independent variables and the correlation coefficient of the variable is used to describe the socio-economic characteristics of private investors and the institutional factors. Hence, the accessibility of private project debt financing was measured as a binary variable which takes value 0 for declined debt financing request and 1 for successfully got private project debt financing.

The probit model was selected from other similar models such as linear probability Model (LPM), and logit models. Linear Probability Model (LPM) is plagued by several problems such as non-normality and heteroscedasticity of the error term, possibility of the dependent variable laying outside 0-1 range most importantly it assumes that the mean value of the dependent variable is linearly related with the explanatory variable. That is the marginal effect of the explanatory variable is remaining constant throughout, which seems patently unrealistic (Gujarati, 1995).

The choice of probit Vs logit depends on the suitably chosen cumulative distribution function (CDF). The logit model uses the cumulative logistic distribution function while the normal CDF is employed in probit model. A normal CDF assumes if a variable follows the normal distribution with mean U_i and variance δ^2 . Given the assumption of normality, the probability that the dependent variable falls in either of the group can be computed from the standard normal CDF (Gujarati, 1995). Since the function employed here assumes normality, the use of normal CDF has been found useful which calls for the choice of probit model for estimation.

3.4.3. MODEL SPECIFICATION, VARIABLE DEFINITION AND MEASUREMENT

3.4.3.1. MODEL SPECIFICATION

To specify the likelihood equation, define P as the probability of getting private project debt finance.

APDF = Pr(APDF_i = 1/X_i) ; if APDF_i = 0 mean fail to get project debt financing

1 – Pr(APDF_i = 1/ X_i); if APDF_i = 1 access/ got project debt financing

The likelihood equation as presented by Long (1997) is

$L(\beta/APDF, X_i) = \prod \Pr(APDF_i = 1/X_i) \prod [1 - \Pr(APDF_i = 1/X_i)]$

APDF = 0

APDF = 1

Where the index of multiplication indicates that the product is taken over only for those cases

Where APDF = 0 and APDF = 1 respectively

The model is thus specified as:

$$\Pr(APDF=1) = \beta_{X_i} + U_i \text{-----}(3.5.1)$$

Where; APDF_i= Vector of access to private project debt financing rate

X_i = Vector of explanatory Variables

β = Vector of Unknown parameters.

U_i = Disturbance or error term, that represent all factors that affect access to private project debt financing but those which are not taken in to account explicitly.

The model being estimated is then specified as:

$$\Pr(DAPDF=1) = \beta_0 + \beta_1 DFR + \beta_2 DSFS + \beta_3 DR + \beta_4 COLL + \beta_5 BS + \beta_6 BE + \beta_7 LOC + \beta_8 DLTS + \beta_9 DOS + \beta_{10} CREXP + \beta_{11} MC + U_i \text{-----}(3.5.2)$$

Where:

D:	Dummy
DAPDF:	Access to private project debt financing /Dummy variable/
DFR:	Financial and Legal system /Dummy variable/
DSFS:	Structure of financial sector /Dummy variable/
DR:	Interest rate / Cost of debt/ /Dummy variable/
COLL:	Collateral Size
BS:	Business size
BE:	Business experience
LOC:	Location of Business
DLTS	Loan Term /Dummy variable/
DOS:	Ownership type and legal status /Dummy variable/
CREXP:	Past Credit Exposure
MC:	Management competency
U_i:	Error term

3.4.3.2. VARIABLE DEFINITION, EXPLANATION, MEASUREMENT AND A PRIOR EXPECTATION.

DEPENDENT /EXPLAINED VARIABLE

The dependent variable of the study is access to private project debt financing is the availability and ease of access to get project debt finance by private investors (1 if the private investors accessed project debt financing, 0 otherwise). It is measured as a dummy variable and has been measured for all the respondents that have got access to project debt financing which takes one and zero for all respondents failed to get project debt financing from financial institutions.

INDEPENDENT/EXPLANATORY VARIABLES

The independent variables for which data is collected includes Financial and Legal system, structure of financial sector, interest rate / Cost of debt/, collateral size, business size, business experience, location of business, loan term, ownership type and legal status, past credit exposure and management competency. The definitions of these variables including the expected signs are presented in table 3.1 below.

Table 3.3: Variable measurement and a prior expectation

Variable	Definition	Expected sign
Dependent Variable		
Access to private project debt financing	Access to private project debt financing will be captured as a dummy and will be constructed as follows: 1= access to private project debt financing (whether in full amount applied for or partial) and 0 = no access to private project debt financing.	
Independent Variables		
Financial and legal system	It measures the degree of financial institution regulatory organ rules, regulations, policy and directives impact on access to private project debt financing. It is measured as a dummy variable from responses of respondent which takes one if financial regulations highly affect the dependent variable otherwise zero, if it doesn't have any effect on access of project debt financing	Positive
Structure of Financial sector	It measures the degree of financial institution branch expansion, level of competition, and product development on accessibility of project debt financing (i.e Dummy Variable which takes 1, if it affects accessibility of project debt financing otherwise 0, if it doesn't have impact on accessibility of project debt financing).	Positive
Interest Rate	Cost of debt/ interest rate is rate or cost of debt charged by financial institution as a percentage of original loans per year for covering its administrative expenses and profit. It is the percentage rate of charge imposed on loan. (continuous variable)	Negative
Collateral size	It is size of collateral and it is measured in terms of estimated amount of collateral offered to back the loan request. (continuous variable)	Positive

Business size	It measures the business size of the applicant put in terms of the total asset amount of the business. (continuous variable)	Positive
Business experience	It measures the number of years the business is in operation. (discrete variable)	Positive
Location of Business	It measures the distance between the respondent's business and financial institution in Kms. (continuous variable)	Negative
Loan Term Structure	It measures the effect of the number of years provided by financial institution to the borrower to fully repay and settle the provided loan and also the frequency of repayment of loan on access to project finance. It is measured as a dummy variable from responses of respondents which takes one if the loan structure affect access to private project debt financing and zero, otherwise.	Positive
Ownership type & Legal Status	Ownership type and legal status is the nature of business organization (i.e it is dummy variable which takes value 1 if it is sole proprietorship otherwise 0; it is other type of business organization.	Negative
Past Credit exposure	It is the maximum amount of loan previously enjoyed by respondents (continuous variable)	Positive
Experience of Managers	Work experience of Managers of the business measured in terms of years of service (discrete variables)	Positive
Educational qualification	Educational qualification of the Managers of the business (Dummy 1= Diploma and above, 0 otherwise)	Positive

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.1. INTRODUCTION

This chapter summarizes and presents questionnaire response rate, descriptive statistics and the inferential / econometric model result of the determinants of access to private project debt financing in Ethiopia. The chapter is organized in four sub sections. i.e. 4.1 present the introductory section about the chapter, 4.2 present the descriptive analysis of data using frequency distribution table and percentage and finally 4.3 presents the inferential analysis using probit regression model and marginal effects.

4.2. QUESTIONNAIRE RETURN RATE

For the purpose of this study, 320 copies of questionnaires were distributed to the sample respondents as per distribution criteria stated in previous chapter. Out of this 269 questionnaires were returned duly filled by respondents . Hence the response rate become 84% and this is illustrated in the following table 4.1.

Table 4.1: Questionnaire response rate

Study Area	Quota	Quota Sample Size	Return Rate	Return Percentage
Wolkite	10%	32	27	84%
Jimma	25%	80	67	84%
Agaro	8%	26	22	85%
Bedele	15%	48	40	83%
Metu	15%	48	40	83%
Gore	7%	22	19	86%
Gambella	20%	64	54	84%
Total	100%	320	269	84%

Source: Survey result

According to Mugenda and Mugenda (2003), response rate refers to the percentage of subjects that respond to a questionnaire. A response rate of 50% is deemed adequate for analysis and reporting, a response of 60% is good and a response rate of 70% and over is very good. On this Zaccount, the study yielded an excellent questionnaire response rate and this phenomenon was attributed to the fact that the data collection instruments were self-administered to the respondents by friends of researcher found on the area working in the banking sector.

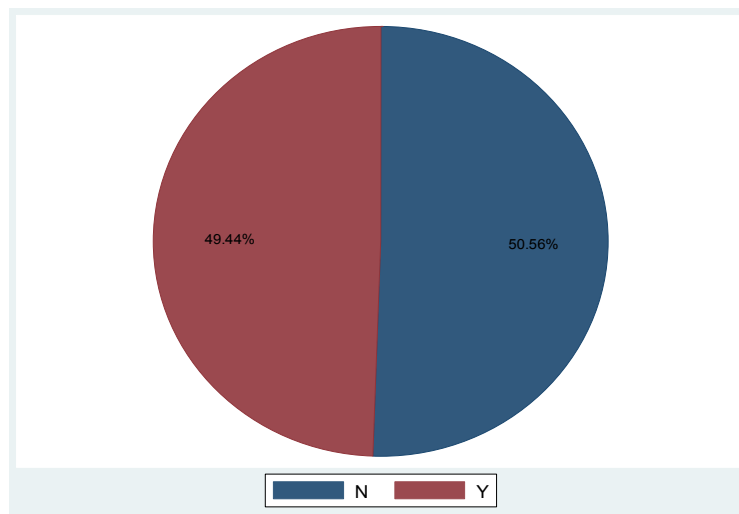
4.3. DESCRIPTIVE STATISTICS

With the objective of finding determinants of access to private project debt financing in Ethiopia, this section describes and discuss about these determinants of access to private project debt financing as per data obtained from questionnaire response. Frequency table and percentage have been used to present the data. The descriptive statistics executed on Econometrics software known as STATA on May 10, 2020.

4.3.1. ACCESSIBILITY OF PRIVATE PROJECT DEBT FINANCING

Figure 4.1 and 4.3 below indicates that only 49% (133) of respondents have access to finance and 51% (136) of the respondents do not have access to debt financing. This pattern obviously shows that private investors do not have easy access to finance. It is noteworthy that out of the 49% of respondents that have access to project debt financing 86.5% is formed as sole proprietorship and the other 13.5% are formed as PLC and Cooperative/Associations. This figure shows that majority of private businesses in Ethiopia is formed as sole proprietorship. In addition, all private businesses that have access to project debt financing have business trade license and this implies that the requirement of business trade license in order to get credit from financial institutions.

Figure 4.1: Access to private project finance



Source: Survey result from stata on May 10, 2020.

4.3.2. OWNERSHIP AND LEGAL STATUS/ FORM OF BUSINESS ORGANIZATION

Out of a total of 269 respondents 90% of private business is organized as sole proprietorship and only 10% are PLC and cooperatives/ association.

Table 4.2: Ownership Status

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Ownership status	Freq.	Percent	Cum.
COOP	5	1.86	1.86
PLC	22	8.18	10.04
SP	242	89.96	100.00
Total	269	100.00	

Source: Survey result from stata on May 10, 2020.

Furthermore, table 4.3 below shows that, out of 242 (90%) businesses organized as a sole proprietorship only 115 (47.5%) of them have accessed project debt financing from financial institutions and 27 (10%) respondents formed as PLC and Cooperative, 18 (66.7%) of them accessed private project debt financing. This implies business organization formed other than sole proprietorship has higher chance of getting private project debt financing from financial institution than business formed as sole proprietorship.

Table 4.3: Ownership Status detail

```
. tab OS APPDF
```

Ownership status	Access to private project debt finance		Total
	N	Y	
COOP	0	5	5
PLC	9	13	22
SP	127	115	242
Total	136	133	269

Source: Survey result from stata on May 10, 2020.

4.3.3. AGE OF BUSINESS IN OPERATION

The mean age of business in operation for those accessed private project debt financing is 15.08 years whereas the mean age of business in operation for those respondents don't have access to private project debt financing is 8.7 years (almost eight years and six months). This implies that private business organization engaged in business for longer year have higher chance to getting project debt financing from financial institution than younger business organization. In other word, the age of business in operation is one determinant for access to private project debt financing.

Table 4.4: Age of Business in Operation

```
. sum BE if DAPPDF==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
BE	133	15.08271	5.334344	6	28

```
. sum BE if DAPPDF==0
```

Variable	Obs	Mean	Std. Dev.	Min	Max
BE	136	8.698529	3.122961	3	16

Source: Survey result from stata on May 10, 2020.

4.3.4. MANAGEMENT COMPETENCY

The mean year of duration of managers of respondent' business in education for those access private debt finance is 12.3 years whereas 7.4 years for those business failed to access debt financing. As it is clearly observed from table 4.6 below, the percentage is increasing as the level of education increases for those respondents who have got access to project debt financing. In contrast the percentage is decreasing as the level of educational qualification increases for those respondents failed to access project debt financing. This implies that educational qualification of manager of the business is one of the major factors that affect access to private project debt financing.

Table 4.5: Educational qualification of managers

. sum MQ if DAPPDF==1

Variable	Obs	Mean	Std. Dev.	Min	Max
MQ	133	12.31579	3.080654	4	16

. sum MQ if DAPPDF==0

Variable	Obs	Mean	Std. Dev.	Min	Max
MQ	136	7.426471	4.012263	0	16

Source: Survey result from stata on May 10, 2020.

Table 4.6: Educational qualification of managers and access to debt financing

Educational Qualification	Frequency	Access to Credit		Don't Access Credit	
		Frequency	%age	Frequency	%age
Illiterate (0 Grade)	9	0	0%	9	100%
Primary School (1-6 years duration)	74	10	14%	64	86%
Secondary School (7 to 12 years duration)	113	64	57%	49	43%
Diploma(13- 14 years duration)	32	24	75%	8	25%
First Degree (15 -16 years duration)	41	35	85%	6	15%
Above First Degree (above 16 years)	0	0	#DIV/0!	0	#DIV/0!
Total	269	133	49%	136	51%

Source: Own computation from survey

Concerning the manager's experience, the mean year of experience of manager of private business is 18.4 years and 9.5 years for those respondents who have got access to private project debt financing and who failed to access private project debt financing, respectively. The figure shows that work experience of general manager of the business is one of the major factors that constraint access to private project debt financing.

In general, the management competency of the business determines accessibility of private project debt financing in Ethiopia.

4.3.5. LOCATION OF BUSINESS

From table 4.8 below, the average distance of the respondent's business from the nearest financial institution is about 2.9 kms and 9.6Kms for those business accessed project debt financing and don't accessed project debt financing, respectively. This implies that business organization nearest to financial institution have higher chance of getting private project debt financing.

Table 4.8: Location of business summary

```
. sum LOC if DAPPDF==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
LOC	133	2.904962	2.007132	.5	10

```
. sum LOC if DAPPDF==0
```

Variable	Obs	Mean	Std. Dev.	Min	Max
LOC	136	9.639706	7.628992	.5	36

Source: Survey result from stata on May 10, 2020.

4.3.6. BUSINESS SIZE

For the case of this study asset size of the business is assumed to be the measure of the business size of respondents. Hence, the average asset size of respondent accessed private project debt financing is ETB 6,376,691.73 whereas the asset size of respondents failed to access project debt financing is ETB 2,492,426.47. This shows that the asset size of the business is one of the constraining factors for accessibility of private project debt financing. Small sized firms are hardest hit by the access to project debt financing problem compared to their counterparts.

Table 4.9: Asset size of respondents

```
. sum BS if DAPPDF==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
BS	133	6376692	5728939	700000	3.20e+07

```
. sum BS if DAPPDF==0
```

Variable	Obs	Mean	Std. Dev.	Min	Max
BS	136	2492426	1638149	350000	7000000

Source: Survey result from stata on May 10, 2020.

4.3.7. PAST CREDIT EXPOSURE

Out of a total of 165 respondents 118 respondents have past credit exposure and 47 of the respondents do not have past credit exposure with any one of financial institutions. The average past credit exposure of respondents is ETB 2,758,894.38 and ETB 456,757.37 for those business accessed project debt financing and failed to access project debt financing, respectively. The figure witnesses the importance of past credit exposure for accessibility of private project debt financing.

Table 4.10: Average past credit exposure of respondents

```
. sum CREXP if DAPPDF==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
CREXP	133	2760038	7502896	0	8.50e+07

```
. sum CREXP if DAPPDF==0
```

Variable	Obs	Mean	Std. Dev.	Min	Max
CREXP	136	456757.4	631959.1	0	3000000

Source: Survey result from stata on May 10, 2020.

4.3.8. COST OF DEBT /INTEREST RATE/

The effect of interest rate on accessibility of private project debt financing is witnessed by 198 (73.6%) (A=96 + SA=102) of the respondents, rejected by only 60 (22.31%) (DA=32 + SD=28) of respondents and 11 (4%) are not sure about interest rate effect on accessibility of debt financing.

Table 4.11: Interest rate effect response

```
. tab R
```

Interest Rate	Freq.	Percent	Cum.
A	96	35.69	35.69
DA	32	11.90	47.58
NS	11	4.09	51.67
SA	102	37.92	89.59
SD	28	10.41	100.00
Total	269	100.00	

Source: Survey result from stata on May 10, 2020.

4.3.9. LOAN TERM STRUCTURE

199 (74%) of respondents support the idea about the effect loan term structure on access to private project debt financing and only 59 (22%) oppose the idea while 11 (4%) are not sure about its effect.

Table 4.12: Respondents response on effect of loan term structure

```
. tab LTS
```

Loan term structure	Freq.	Percent	Cum.
A	98	36.43	36.43
DA	34	12.64	49.07
NS	11	4.09	53.16
SA	101	37.55	90.71
SD	25	9.29	100.00
Total	269	100.00	

Source: Survey result from stata on May 10, 2020.

4.3.10. COLLATERAL REQUIREMENT

The average collateral position of respondents for those access private project debt financing is ETB 9,329,323.30 and that of respondents don't have access to private project debt financing is ETB 6,241,176.47. This implies that strong collateral position enhances accessibility of project debt financing.

Table 4.13: Collateral requirement

```
. sum COLL if DAPPDF==1
```

Variable	Obs	Mean	Std. Dev.	Min	Max
COLL	133	9329323	7897763	1800000	4.50e+07

```
. sum COLL if DAPPDF==0
```

Variable	Obs	Mean	Std. Dev.	Min	Max
COLL	136	6241176	1.02e+07	600000	8.10e+07

Source: Survey result from stata on May 10, 2020.

4.3.11. FINANCIAL REGULATION

Majority of (i.e.200, 74%) of respondents witness the effect of regulatory organ financial regulation on access to private project debt financing and 58 (22%) of respondents disagree about the effect of financial regulation on accessibility of private project debt financing. The remaining 11 (4%) respondents are not sure about the effect of financial regulation on accessibility of project financing. For instance the obligation imposed on Ethiopian Banks to buy bill to the extent of 27% their loan portifolo reduce the bank’s loanable fund and affect access to credit. On the other hand, the sector based loan composition requirment on banks encourage private investors to invest in priority sectors such as agriculture, manufacturing and so on by enhancing specific sector access to credit.

Table 4.14: Financial regulation impact on accessibility of debt financing

. tab FR

Financial regulation	Freq.	Percent	Cum.
A	93	34.57	34.57
DA	27	10.04	44.61
NS	11	4.09	48.70
SA	107	39.78	88.48
SD	31	11.52	100.00
Total	269	100.00	

Source: Survey result from stata on May 10, 2020.

4.3.12. STRUCTURE OF FINANCIAL SECTOR

Structure of financial sector implies the number of banks available in the country, number of branch network, availability of diversified banking product and services, the number of service delivery channels and so on. The degree of branch expansion, product and service competition with in the banks have an impact on access to private project debt financing. The study witness that 220 (82%) respondents agree with the idea of effect of financial sector structure on accessibility of private project debt financing and 32 (12%) oppose and the remaining 11 (7%) are not sure about its effect. Increase in number of Banks operating in the country, aggressive

branch expansion, new product and service development and stiff competition in the banking industry enhances financial inclusion in general and access to credit in particular.

Table 4.15: Structure of financial sector impact on accessibility of debt financing

```
. tab SFS
```

Structure of financial sector	Freq.	Percent	Cum.
A	109	40.52	40.52
DA	19	7.06	47.58
NS	17	6.32	53.90
SA	111	41.26	95.17
SD	13	4.83	100.00
Total	269	100.00	

Source: Survey result from stata on May 10, 2020.

4.4. INFERENCE ANALYSIS

4.4.1. CORRELATION

The study conducted a correlation analysis of the variables of the study as shown in the following table. To establish the relationship between the variables, the study used Karl Pearson's coefficient of correlation (see Table 4.11). It was found that there was a positive strong correlation between business experience and manager's work experience ($r=0.7097$), positive moderate correlation between manager's qualification and business size ($r= 0.3592$), managers work experience and business size ($r=0.3534$) and managers work experience and loan term structure ($r=0.31$). However, there is moderate negative correlation between manager's qualification and location of business.

It is also concluded that there is strong positive correlation between manager's work experience and managers qualification ($r= 0.4364$), business experience and location of business ($r=0.4027$) and manager's qualification and manager's work experience ($r=0.4617$). On the other hand, there is positive negative correlation between managers experience and location of business ($r= - 0.4271$). However, there was no or weak correlation between all the other independent variables.

Table 4.16: Pearson correlation coefficient matrix

```
. corr DAPPDF BE MQ ME LOC BS COLL CREXP DOS DR DLTS DFR DSFS
(obs=269)
```

	DAPPDF	BE	MQ	ME	LOC	BS	COLL	CREXP	DOS
DAPPDF	1.0000								
BE	0.5923	1.0000							
MQ	0.5651	0.4364	1.0000						
ME	0.6895	0.7097	0.4617	1.0000					
LOC	-0.5164	-0.4027	-0.3954	-0.4271	1.0000				
BS	0.4215	0.2224	0.3592	0.3534	-0.2094	1.0000			
COLL	0.1672	0.0610	0.0086	0.0624	-0.1909	0.0113	1.0000		
CREXP	0.2133	0.0798	0.1940	0.1001	-0.1409	0.2603	0.0351	1.0000	
DOS	-0.1151	-0.0893	-0.0664	-0.0622	0.0290	0.0550	0.0085	0.0348	1.0000
DR	-0.2175	-0.0427	-0.0899	-0.1077	0.0512	0.0162	-0.0377	0.0431	0.1649
DLTS	0.4170	0.2827	0.1862	0.3100	-0.2128	0.2325	0.0769	0.0982	-0.0007
DFR	-0.2875	-0.2764	-0.2416	-0.1590	0.1488	-0.0246	-0.0856	-0.0124	0.0304
DSFS	0.1585	0.1035	0.0119	0.1338	-0.0863	0.0994	0.1076	0.0543	-0.1256

	DR	DLTS	DFR	DSFS
DR	1.0000			
DLTS	-0.1629	1.0000		
DFR	0.0732	-0.0379	1.0000	
DSFS	-0.0422	0.1591	-0.0125	1.0000

Source: Survey result from stata on May 10, 2020

4.4.2. DIAGNOSTIC TESTS

Diagnostic test is one of a set of procedures available for regression analysis that seek to assess the validity of a model in any of a number of different ways. This assessment may be an exploration of the model’s underlying statistical assumptions, an examination of the structure of the model by considering formulations that have fewer, more or different explanatory variables, or a study of subgroups of observations, looking for those that are either poorly represented by the model (outliers) or that have a relatively large effect on the regression model’s predictions.

The major assumptions need to be tested in diagnostic test may include:

- The probit regression assumes that there is minimal or no multicollinearity among the independent variables.
- The probit regression must avoid the problem of heteroscedasticity.
- There must be no specification error

In order to test all the above assumptions are fulfilled, the study perform the following diagnostic tests: Specification error, Goodness of fit, Multicollinearity and Heteroscedasticity tests.

4.4.2.1. SPECIFICATION ERROR TEST

A model specification error can occur when one or more relevant variables are omitted from the model or one or more irrelevant variables are included in the model. If relevant variables are omitted from the model, the common variance they share with included variables may be wrongly attributed to those variables, and the error term is inflated. On the other hand, if irrelevant variables are included in the model, the common variance they share with included variables may be wrongly attributed to them. Model specification errors can substantially affect the estimate of regression coefficients.

The linktest command performs a model specification link test for single-equation models. linktest is based on the idea that if a regression is properly specified, one should not be able to find any additional independent variables that are significant except by chance. linktest creates two new variables, the variable of prediction, `_hat`, and the variable of squared prediction, `_hatsq`. The model is then refit using these two variables as predictors. `_hat` should be significant since it is the predicted value. On the other hand, `_hatsq` shouldn't, because if our model is specified correctly, the squared predictions should not have much explanatory power. That is we wouldn't expect `_hatsq` to be a significant predictor if our model is specified correctly. So, we will be looking at the p-value for `_hatsq` which is insignificant (>0.05) confirming that our model is correctly specified.

Table 4.18: Specification error test

```
. linktest

Iteration 0:   log likelihood = -186.43986
Iteration 1:   log likelihood = -21.471725
Iteration 2:   log likelihood = -20.83853
Iteration 3:   log likelihood = -20.624966
Iteration 4:   log likelihood = -20.563805
Iteration 5:   log likelihood = -20.338283
Iteration 6:   log likelihood = -20.328317
Iteration 7:   log likelihood = -20.328265
Iteration 8:   log likelihood = -20.328265

Probit regression                               Number of obs   =       269
                                                LR chi2(2)      =       332.22
                                                Prob > chi2     =       0.0000
                                                Pseudo R2      =       0.8910

Log likelihood = -20.328265

-----+-----
      DAPPDF |          Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----+-----
      _hat   |    1.049993     .2124645     4.94   0.000     .6335701     1.466416
     _hatsq  |    .0554142     .01946      -0.27   0.784     .0172733     .0935551
      _cons  |   -.0616265     .2251481     2.85   0.004    -.5029086     .3796557
-----+-----

Note: 0 failures and 88 successes completely determined.
```

Source: Survey result from stata on May 10, 2020

4.4.2.2. GOODNESS OF FIT TEST

The use of conventional R^2 for goodness of fit when the dependent variable takes either 1 or 0 is not appropriate. A summary measure used similar to the conventional R^2 that have been suggested for models with qualitative dependent variable is calculated based on likelihood ratio as follows:

$$= 1 - \frac{L(\beta_0, \beta_i)}{L(\beta_0, 0)}$$

Where $L(\beta_0, \beta_i)$ is the maximized value of the log likelihood of the model being estimated, $L(\beta_0, 0)$ is the value of the likelihood estimated only with constant term. This measure has value 0, when the entire slope coefficients are zero, and value 1 when the model is perfect predictor.

In our Probit model this summary measure is:

$$L(\beta_0, \beta_i) = -20.8136$$

$$L(\beta_0, 0) = -186.4398$$

$$\text{Hence, } 1 - \frac{(-20.8136)}{(-186.4398)} = 1 - 0.1116$$

$$= \underline{\underline{0.8884}}$$

This result indicates that our Probit model explains about 88.84% of the variation which is more than 50% rule of thumb.

4.4.2.3. MULTICOLLINEARITY TEST

We say that there is multicollinearity problem in an equation when there is correlation between variables employed in the regression model (when the assumption that $\text{cov}(x_1, x_2) = 0$ is violated). That is the existence of a "perfect" or exact linear relationship among some or all explanatory variables of a regression model (Gujarati, 1995). The inter correlation between the two variables can be measured by the partial correlation coefficient between one variable with another variable. As a rule of thumb, if the correlation coefficient between the two variables is greater than 0.8, one can conclude that there is a serious problem of multicollinearity. Accordingly, the test result shows that the correlation coefficient between all variables under

consideration is less than 0.8 (please refer table 4.16) implying that the explanatory variables can separately contribute to the variation in the dependent variable.

4.4.2.4. HETEROSCEDASTICITY TEST

An important assumption of the Probit model estimation is that the disturbances U_i appearing in the regression function is homoscedastic. That is they have the same variance ($E(U_i^2) = \sigma^2$ where $i = 1, 2, \dots, n$). It can no longer be maintained that in the LPM, Logit and Probit model, the disturbances are homoscedastic. This is, however, not surprising. As statistical theory shows, for a Bernoulli distribution the theoretical mean and variances are, respectively, p and $p(1-p)$. Hence, the error variance is heteroscedastic (Gujarati, 2004). Therefore the equations estimated in this paper are found to face heteroscedasticity problem by default. However, since the access to project debt finance equation is estimated using probit model, running robust estimation using STATA software easily solves its problem (See Table 4.19).

4.4.2.5. VALIDITY AND RELIABILITY TEST

Validity refers to the degree to which the measures of the instruments measure what it is supposed to measure (Joppe 2000; Mugenda, 2008). Face validity of a measuring instrument was established by pre-testing questionnaires on sample private business owners while pilot testing. The research assessed the clarity and ease of use of the research instruments and any sensitive, biased items were identified and modified. Content validity of this study was determined by first discussing the items in the instrument with three experts who indicated against items (with a rating scale of 1–4) in the questionnaire whether it measured what it was meant to measure or not in relation to the research objectives. Content validity index of 0.802 was computed. Mugenda and Mugenda (2003) recommend a content validity index of above 0.5, indicating that the validity of the instrument was acceptable.

Reliability of research instruments indicates the degree to which the research is without bias therefore ensured consistent measurement across time and the several items within instrument (Kothari, 2004). The study used the Cronbach's alpha coefficient to determine the internal consistency of the scale that was used to measure the reliability of the variables of the study. In this regard, a Cronbach's alpha of 0.6 is considered satisfactory and 0.7 to 0.8 good (Cooper and

Schindler 2008; Mugenda and Mugenda, 2003; Sekaran and Bougie, 2013). The alpha coefficients were all greater than 0.7, indicating an acceptable reliability of the instruments. The instrument therefore was appropriate for the study.

4.4.3. REGRESSION RESULTS

The primary objectives of the study is to examine empirically the determinants of access to private project debt financing in Ethiopia with special emphasis of the case of South- western part of Ethiopia. The dependent variable of the study is access to private project debt financing which is expressed as a function of key factors such as ownership and legal status, age of business in operation, management competency, location of business, business size, past credit exposure, cost of debt/interest rate/, loan term structure, collateral requirement, financial regulation and structure of financial sector.

The probit regressions model was employed for the estimation and marginal effects of each significant explanatory variables. The STATA package was use to estimate the model and compute the marginal effect, so that direct marginal implication of those explaining variables to influence the independent variables were also conducted. To handle the heteroscedasticity problem, the robust probit regression were also conducted and presented as follows.

The probability to examine whether a private sector investor has access to private project debt financing is a function of key factors as shown in the following equation.

$$\mathbf{DAPDF}_i = \mathbf{f}(\mathbf{DFR}, \mathbf{DSFS}, \mathbf{DR}, \mathbf{COLL}, \mathbf{BS}, \mathbf{BE}, \mathbf{LOC}, \mathbf{DLTS}, \mathbf{DOS}, \mathbf{CREXP}, \mathbf{MC})\text{-----}(1)$$

Where:

- DAPDF:** Access to private project debt financing /Dummy Variable/
- DFLS:** Financial regulation and Legal system /Dummy Variable/
- DSFS:** Structure of financial sector /Dummy Variable/
- DR:** Interest rate / Cost of debt /Dummy Variable/
- CS:** Collateral Size
- BS:** Business size
- EXP:** Business experience
- LOC:** Location of Business

- DLT:** Loan Term /Dummy Variable/
DOTLS: Ownership type and legal status /Dummy Variable/
CREXP: Past Credit Exposure
MC: Management competency
U_i: Error term

$$\begin{aligned}
 \text{DAPDF}_i = & \beta_0 + \beta_1\text{DFR} + \beta_2\text{DSFS} + \beta_3\text{DR} + \beta_4\text{COLL} + \beta_5\text{BS} + \beta_6\text{BE} + \beta_7\text{LOC} + \\
 & \beta_8\text{DLTS} + \beta_9\text{DOS} + \beta_{10}\text{CREXP} + \beta_{11}\text{MC} + U_i \text{-----} \left\{ \begin{array}{l} 1 \text{ if APDF} > 0 \\ 0 \text{ otherwise} \end{array} \right\} \text{----} \\
 & \text{-----}(2)
 \end{aligned}$$

Keeping other factors constant, equation 2 can be reduced to a general format as:

$$\text{APDF}_i = \beta_0 + \beta_1\text{DFR} + \beta_2\text{DSFS} + \beta_3\text{DR} + \beta_4\text{COLL} + \beta_5\text{BS} + \beta_6\text{BE} + \beta_7\text{LOC} + \beta_8\text{DLTS} + \beta_9\text{DOS} + \beta_{10}\text{CREXP} + \beta_{11}\text{MC} \text{-----}(3)$$

Access to private project debt financing (APDF_i) in this study is defined as credit from financial institutions granted to support private investors for financing any kind of project implementation. It is our outcome variable and was captured as a dummy and was constructed in terms of value of 1 when firms have access to credit from financial institution and 0 if otherwise.

Table 4.12 below presents econometric result from probit model on access to private project debt financing. The estimated variables are jointly statistically significant based on the value of LRChi2 (=331.25) and the joint probability (prob>Chi2 = 0.0000).

Table 4.19: Regression Result

```

Probit regression
Log pseudolikelihood = -20.813602
Number of obs = 269
Wald chi2(12) = 38.89
Prob > chi2 = 0.0001
Pseudo R2 = 0.8884
    
```

DAPPDF	Coef.	Robust Std. Err.	z	P> z	[95% Conf. Interval]	
BE	.3241571	.0858781	3.77	0.000	.1558391	.4924752
MQ	.1681299	.0782321	2.15	0.032	.0147979	.321462
ME	.4519243	.0975511	4.63	0.000	.2607277	.6431209
LOC	-.2797491	.0966413	-2.89	0.004	-.4691625	-.0903357
BS	5.12e-08	1.37e-07	0.37	0.709	-2.18e-07	3.20e-07
COLL	4.49e-08	1.48e-08	3.03	0.002	1.59e-08	7.38e-08
CREXP	1.02e-06	4.42e-07	2.30	0.021	1.50e-07	1.88e-06
DOS	-1.769445	.8817389	-2.01	0.045	-3.497622	-.0412686
DR	-1.45267	.4782847	-3.04	0.002	-2.390091	-.5152495
DLTS	2.44099	.76568	3.19	0.001	.9402847	3.941695
DFR	-2.197718	.8546893	-2.57	0.010	-3.872878	-.5225579
DSFS	1.480111	.7372604	2.01	0.045	.0351077	2.925115
_cons	-10.11516	2.396646	-4.22	0.000	-14.8125	-5.417822

Source: Stata output on May 10, 2020

Table 4.19 shows a model summary and indicates the pseudo R square used as test for model fitness (i.e 0.8884 or 88.84%). This implies that the selected independent variables used to explain dependent variable explain at 88.84% perfection. In other terms, almost 89% of the change in dependent variable is due to the change on those state independent variables. That means the model explains 88.84% the variance in the access to private project debt finance; 11.16 % of variations are brought about by factors not captured in the objectives. Therefore, further research should be conducted to investigate the other factors (11.16 %) that affect access to private project debt finance. However, the regression equation appears to be very useful for making predictions since the value of R2 is close to 1.

On the other hand, it is important to identify the statistical significance of each explanatory variable. As shown in the above table, out of twelve independent variables regressed in the model, the constant variable and other eleven coefficients of the explanatory variables were found to be statistically significant at 95 percent confidence level.

Explanatory variables such as BE (Business experience/ age of business in operation), MQ (Business manager's educational qualification), ME (Business manager's work experience), LOC (Location of business/proximity to financial institutions), COLL (Collateral value), CREXP (Past credit exposure), DOS (Business ownership status/form of business organization), DR (Interest rate), DLTS (loan term structure), DFR (Financial regulation), and DSFS (Structure of financial sector) are found to be statistically significant to influence accessibility of private project debt financing.

Variables such as BE (Business experience/ age of business in operation), MQ (Business manager's educational qualification), ME Business manager's work experience), COLL (Collateral value), CREXP (Past credit exposure), DLTS(loan term structure) and DSFS(Structure of financial sector) were found to be positively influence access to private project debt financing at 1% and 5% level of significant while LOC (Location of Business), DOS (Ownership status), DR (Cost of debt/ interest rate), DFR (Financial regulation) and constant term have been found as negatively influence access to private project debt financing at 1% and 5% level of significant.

From the study finding, BS (Business size) were found to be statistically insignificant variable to explain access to private project debt financing of business. This may be due to lack of well-organized accounting practice in Ethiopia which leads to bias and high tendency to hide the size of business by respondents.

4.4.4. INTERPRETATION

Out of the twelve variables hypothesized the determinant of access to private project debt financing in Ethiopia, eleven of them were found to be statistically significant. The maximum likelihood estimates of the probit regression model shows that BE (Business experience/ age of business in operation), MQ (Business manager's educational qualification), ME (Business manager's work experience), LOC (Location of business/proximity to financial institutions), COLL (Collateral value), CREXP (Past credit exposure), DOS (Business ownership status/form of business organization), DR (Interest rate), DLTS (loan term structure), DFR (Financial regulation), and DSFS (Structure of financial sector) were significant factors determining access

to private project debt financing in Ethiopia. All the above stated coefficients of variables were statistically significant at 5% predictive probability level.

The model estimate confirms that age of business in operation /business experience/ has a significant and positive impact on access to private project debt financing. Other things being constant, the predictive probability of being successful in getting project debt financing or not

Increases or decreases by a factor of 0.324 as business experience increases or decreases by one year, respectively. Age of business in operation indicates a positive association with access to private project debt financing. An additional one-year increase in the age of the private business causes 32.4 percent probability increase in the private business likelihood for accessing project debt financing. Thus, as the private business advances in age, there is the tendency for it to have easy access to project financing from financial institutions. This result agrees with the findings by Klapper& et al. (2010),Fatoki and Asah (2011), Beck and Cull (2014), and finally that of Quartey (2003) in Ghana lend credence to this assertion.

The result of the probit model shows that education level of manager of the business has significant and positive effect on access to private project debt financing. It might be because business manager, who has higher education level, could find better market for their Products and services, they could be cost conscious that is cost-effective usage of resources and they may have future investment plan working with the Bank. These and other reasons make the business manager who has a higher education status to have a good repayment performance by enhancing business profitability. An additional one-year increase in educational status of manager of business causes 16.8 percent probability increase in the private business likelihood for accessing project debt financing. This implies that a borrower will likely have greater loan repayment ability and enhance the confidence of financial institution on the business when the project manager has a higher educational level and vis-à-vis. This also confirms the result of Nyanzu& et.al (2017).

Moreover, business management experience has a positive coefficient and it is significant at 10% predictive probability level. Increasing managerial experience of business manager by one more year increases the predictive probability of accessing private project debt finance by 45.2 percent. This means that the likelihood of getting private project debt finance increases when the number of years of managerial experience of business manager increase and vis-à-vis. The

implication is that managerial experience of business manager could probably lead to proper utilization the financed project and inputs and this could have a positive effect on the magnitude of business profit. By implication the management competency of private business assists the well-functioning of the business, enhance profitability, ease loan repayment capacity and enhance lenders confidence on the business. This result confirmed the result of Nyanzu & et.al (2017).

With regard to location of business, the model shows that it has a negative and significant effect on access to private project debt financing. This implies that business organization nearest to financial institution has higher chance of getting private project debt financing than business organization located far from financial institution. As the distance between private business and financial institution increases by one kilometer, the likelihood of accessing private project debt finance decreases by 28 percent and vice a versa. Nyanzu & et.al (2017) conclude same result with the above finding.

The study sought to establish the influence of collateral requirements on access to private project debt finance. Collateral refers to the assets committed by borrowers to a lender as security for debt payment (Gitman, 2003). The study found that collateral requirements influence access to private project debt finance in Ethiopia. It is evident that most businesses are denied and discriminated by the lenders in provision of financing. This is because of high risk and for not having adequate resources to provide as collateral. The study also found that the importance of collateral in order to reduce moral hazard. This finding shows that collateral value has positive and significant effect on access to private project debt finance. Other things being constant, the probability of accessing private project debt finance increases by 4.49×10^{-6} percent when the collateral value increase by one Birr. This is consistent with the findings of Osano & Languitone (2016), Firewoini Gebreyesus (2016), Joseph Nyanzi (2016) and Ndegwa Patricia & Dr. Wario N (2016).

The study shows that past bank credit exposure of private business has a positive and significant impact on access to private project debt finance. This implies that private businesses having frequent and higher amount of past credit exposure has higher chance of accessing private project debt financing than having infrequent and lower /Or no/ amount of past credit exposure. According to the model, a one Birr increase/ decrease in past bank credit exposure of private

business increase/ decreases the probability of accessing private project debt finance by 1.02×10^{-4} percent, respectively.

The study revealed that ownership status or form of business formation has negative and significant effect on access to private project debt financing. Other factors being constant, business organization formed other than sole proprietorship have higher probability of accessing private project debt financing by 177% than that of sole proprietorship. In other words sole proprietorship has lower chance of getting private project debt finance. This might be due to financial institutions confidence on other business organization might be due to business continuity problem if the owner may die and other obligatory accounting system adopted on those organization which assist financial institution to clearly identify financial position and financial performance of business.

Interest rate were found to be negatively and significantly related to access to private project debt financing at 5 percent level of significant. This implies that higher interest rate reduces access to private project debt because rational business owner seeks resources with lower price. In addition to the finding being consistent with a prior expectation, they were consistent with the finding by other scholar who establish similar relationship (see Joseph Nyanzi (2016) and Nyanzu& et.al (2017). The result also consistent with the adverse selection theory which was previously discussed in chapter two sub section 2.1.7.4.

The study also shows that loan term structure has a positive and significant effect on access to private project debt financing in Ethiopia. Business owners need relaxed repayment mode and long loan maturity date (Ndegwa Patricia & Dr. Wario N, 2016)

The study revealed that structure of financial sector has a positive and significant relationship with access to private project debt financing. Opening of new Bank, aggressive branch expansion and diversification of banking product enhance accessibility of banking product in general and credit in particular.

The model shows that financial regulation has a negative and significant relationship with access to private project debt financing. This implies that ridged financial regulation prohibit financial institution to freely play in the market and this will create shortage of loanable fund and decreases accessibility of credit in general and project debt financing in particular. The banking system regulatory structure should have a greater implication between concentration of the

market and access to finance. It is important to note that when there is a high regulatory regime, then entry barriers may increase. In most cases, the competitiveness of the banking system will not rely on the actual market structure but will rely on the regulatory regime of the country. The regulatory restrictions may reduce the efficiency and competitiveness in the banking system and further block banks from using their information advantages Osano and Languitone (2016).

4.4.5. POST ESTIMATION

4.4.5.1. MARGINAL EFFECT OF SIGNIFICANT VARIABLES

Each significant explanatory variable does not have the same level of impact on access to private project debt financing. To determine the comparative significance of each independent variable access to private project debt financing, it requires calculation of marginal effect of each significant independent variable and the marginal effect of the variable have been undertaken after the probit model estimation. The marginal effect of the variable existed as follows:

Table 4.20. Marginal covariates with respect to dependent variable (access to private project debt financing)

```
. margins, dydx( BE MQ ME LOC COLL CREXP DOS DR DLTS DFR DSFS)

Average marginal effects          Number of obs   =          269
Model VCE      : Robust

Expression      : Pr(DAPPDF), predict()
dy/dx w.r.t.   : BE MQ ME LOC COLL CREXP DOS DR DLTS DFR DSFS
```

	Delta-method				[95% Conf. Interval]	
	dy/dx	Std. Err.	z	P> z		
BE	.0140423	.0028887	4.86	0.000	.0083807	.019704
MQ	.0072833	.0028735	2.53	0.011	.0016514	.0129153
ME	.0195772	.0023079	8.48	0.000	.0150537	.0241006
LOC	-.0121186	.003328	-3.64	0.000	-.0186413	-.0055959
COLL	1.94e-09	5.38e-10	3.61	0.000	8.89e-10	3.00e-09
CREXP	4.41e-08	1.48e-08	2.98	0.003	1.51e-08	7.30e-08
DOS*	-.0766516	.0313451	-2.45	0.014	-.1380868	-.0152163
DR*	-.062929	.0180961	-3.48	0.001	-.0983967	-.0274613
DLTS*	.1057426	.0237953	4.44	0.000	.0591045	.1523806
DFR*	-.0952042	.0276338	-3.45	0.001	-.1493654	-.0410429
DSFS*	.0641178	.0299906	2.14	0.033	.0053373	.1228982

(*) dy/dx is for discret change of dummy variables from 0 to 1.

Source: Stata output on May 10, 2020

As can be seen from Table 4.20 shows that the marginal effect of loan term structure is 10.57% which is the highest positive statistically significant variable compared to other significant explanatory variables. Other things remaining constant for a discrete change in DLTS from 0 to 1, the probability of being successful in getting private project debt increases by 10.57%. Subsequent to loan term structure of project debt, structure of financial sector has statistically significant and positive effect on access to private project debt financing. The marginal effect of being successful increases by 6.41% for a discrete change in DSFS from 0 to 1. The third positive statistically significant variable compared with other significant variable is managers experience. Other things remain constant, for a one-year increase in business manager's work experience increases the probability of success for project debt financing by 1.95%. Business experience is the fourth positive significant variable. Citrus perhaps, for a one year in business

experience of a business, it causes an increase in the probability of getting private project debt financing by 1.40%. The fifth variable having positive significant effect on access to private project debt financing is manager's educational qualification. Other things being constant, one year increase in business manager's educational qualification will increase the probability of getting private project debt financing by 0.72%, vice versa. Past credit exposure and collateral value are the least positive statistically significant variable having a marginal effect of 0.0000044% and 0.0000002%, respectively. This implies that, other things being constant, a one Birr change in past credit exposure and collateral value changes the probability of getting project debt financing by 0.0000044% and 0.0000002%, respectively.

On the other hand, from the negative statistically significant variables financial regulation has highest marginal effect which is 9.25%. This implies that, other things being constant, the discrete change in financial regulation response from 0 to 1 decreases the probability of getting private project debt financing by 9.25%. Following to financial regulation, ownership status has 7.67% statistically significant and negative effect on access to private project debt finance. This implies that keeping other things constant, a change from other type of business formation to sole proprietorship decreases access to private project debt finance by 7.67%. The other statistically negative effect on access to private project debt finance is interest rate. The discrete change of DR from 0 to 1 decreases access to private project debt finance by 6.29%. Finally, from the negative statistically significant variables the lowest statistically significant variable is location of business which has a marginal effect of about 1.21%. This indicates that decreasing

Location of business from financial institution by one kilometer the probability of being successful in accessing project finance increases by 1.21%.

4.4.5.2. MODEL SELECTION CRITERIA AFTER PROBIT REGRESSION

As shown in the following Table 4.14, the null hypothesis for model selection is that the model is good model or all the independent variables have a power of explaining the dependent variable. From Table 4.21, the researcher fear to reject the null hypothesis and hence, the model is well specified to analyze the determinant of access to private project debt finance in Ethiopia.

Table 4.21 Goodness of fit for model selection

Probit model for status, goodness-of-fit test

Ho: the model is good model vs

Ha: not H₀

Probit model for DAPPDF, goodness-of-fit test

```
number of observations =      269
number of covariate patterns =    256
Pearson chi2(243) =      71.26
Prob > chi2 =      1.0000
```

4.4.5.3. SENSITIVITY AND SPECIFICITY ANALYSIS

As shown in Table 22, the overall rate of correct classification is estimated to be 97.74%, with 94.85% of the successful in getting project finance group correctly classifier (specificity) and 94.89% of unsuccessful in getting project finance group correctly classified (sensitivity). Classification is sensitive to the relative sizes of each component group, and always favors Classification into the larger group.

Table 4.22 Sensitivity and Specification

Sensitivity	Pr(+ Successful(D))	97.74%
Specificity	Pr(- Not Successful(~D))	94.85%
Positive predictive value	Pr(Successful(D) +)	94.89%
Negative predictive value	Pr(Not Successful (~D) -)	97.73%

CHAPTER FIVE

CONCLUSION AND RECOMMENDATION

5.1. Conclusion

Based on the study findings, it is noted that the study variables that formed the objectives guiding this work, except Business size, are found to be significant determinants of access to

private project debt financing in Ethiopia. These major variables are business experience, business managers competency, location of business, collateral size, past credit exposure, ownership status, cost of debt, loan term structure, financial regulation and structure of financial sectors. All these variables impact on access to private project debt financing are confirmed both with descriptive statistics and inferential analysis.

Business experience, Manager's competency, collateral size, past credit exposure, loan term structure and structure of financial sector have a positive significant effect on access to private project debt financing whereas, location of business, ownership status, interest rate and financial regulation have negative impact on access to private project debt financing in Ethiopia.

The findings revealed that business size is not significantly affect access to private project debt finance in Ethiopia.

5.2. RECOMMENDATION

From the above finding the researcher recommends that there is need by the government and other stakeholders to intervene on the following recommendations in order to increase access to private project debt financing.

- The government of Ethiopia must create and enhance conducive operating environment for financial institutions to further expand their branch outlet and product development by relaxing financial regulation which enhance access to credit in the economy which help effective functioning of private business in the country.
- Government need to encourage, and state-owned financial institutions must engage in financing younger private project owners by taking risk, relaxing requirements and lowering cost of debt as younger private project owners are disadvantaged in getting access credit due to business experience.
- The government should put in place mechanisms that can provide financial institutions with tax holidays and rebates to encourage the banks to lower interest rate on loans targeted to private project.
- Government should have to take some part of risk of financial institutions to relax the collateral requirement for private project by providing guarantee for loan provided to productive private sectors.

- Government of should have to relax the current active policy which obligate financial institutions to provide limited proportion of credit for long term project to relax the loan maturity period and relaxed repayment of loan.
- Government should have to aggressively work and enforce to standardize the accounting practice of private business to properly identify the financial position and financial performance of private business for loan analysis.
- Financial institutions should have to engage in research and development to expand their product and services aimed to private sector to enhance accessibility of credit of private sectors.
- Lenders should have to set favorable pricing for their credit service offered for private sector for long term investment by applying economies of scale.
- Lenders should grant relaxed repayment period and frequency for long term private project borrower in order to enhance accessibility of private project debt financing.
- Private investors engaged in long term project investment are advised to work on development and capacity building of their business management in order to enhance the businesses profitability which in turn increases the probability of accessing private project debt financing.
- Private sectors recommended to enhance the collateral position of their business in order to easily access debt financing from financial institution especially in Ethiopia where collateral is one of the critical factors for granting loan.

5.3. RECOMMENDATION FOR FURTHER RESEARCH STUDY

The study tries to identify determinants of access to private project debt financing in Ethiopia but limited to the case study of South-western part of Ethiopia. On the basis of this finding this study proposes further studies to be carried out on the same topic in other part which is not covered by this study.

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Appendix

Jimma University
College of Business and Economics
MA In Project Management and Finance

QUESTIONNAIRE

My Name is Amanuel Mengesha, a Master of Project Management and Finance student at Jimma University college of Business and Economics. I am doing a study on **Determinants of Access to Private Project Debt Dinancing in Ethiopia- the case study of South Western part of Ethiopia** as a partial fulfillment of requirement of MA in Project Management and Finance. I kindly request you to answer objectively the questions below about your knowledge and experience on research problem. The information provided will be treated with highest degree of confidence, and at no point should you respond to a question you don't feel comfortable answering. When the questionnaire is completed, it should be submitted to the researcher or data collector. Thank you very much for your kind cooperation.

Part One: General information of the business

1. Name of Organization / Business: _____
2. Type of Business organization. (please tick as appropriate)
 - Sole Proprietorship &/or family owned business
 - Partnership
 - Private Limited Company
 - Share Company/ Corporation
3. Do you have business trading license?
 - Yes No
4. For how long has your company/ business been in operations?(please tick as appropriate)
 - Less than one year Between 1 and 5 year
 - Between 6 and 10 years Between 11 and 15 years
 - Over 15 years
5. Do you have professionals in managerial positions in your company/ organization?
 -

Yes

No

6. If your answer for the above question is “YES” what is the highest level of qualification of the manger your organization?

Primary School

Secondary School

College Graduate/Diploma/

First degree /BA, BSC,...)

Second degree/ Masters/

Above Second Degree (PhD)

7. How many years of work experience your organization Manager have? _____years

8. How many kilometers your business is located from nearest financial institutions?
_____ kms

9. What is your organization/ Business current estimated total asset?

Less than ETB 500,000.00

Between ETB 500,000.00 to 1million

Between ETB 1 million to 2 million

Between ETB 2Milion to 5 million

Between ETB 5 Million to 10 Million

Above ETB 10 Million

10. Do you have past credit exposure from any financial institution?

Yes

No

11. If your answer for Q 8 is “YES” what is your last credit exposure?

Less than ETB 500,000.00

Between ETB 500,000.00 to 1million

Between ETB 1 million to 2 million

Between ETB 2 Milion to 5 Milion

Between ETB 5 Million to 10 Million

Above ETB 10 Million

12. Have you ever applied for project debt financing from financial institution?

Yes

No

13. Have you got the project debt financing from any financial institutions?

Yes

No

14. What is the estimated value of your collateral offered to back the loan request?
ETB_____

PART TWO

The following questions relate to the financing issues of your organization/ business: the determinants of accessing project debt financing and how it affects your business.

Please state if you agree or disagree to the following statements by ticking the appropriate box below.[Scale: Strongly Agree =5, Agree=4, Not sure= 0 Disagree=2, strongly disagree=1]

S.No	Proclamations	5	4	3	2	1
15	Do you agree that cost of debt / lending interest rate in Ethiopia are so high?					
16	Do you agree that interest paid on loan in Ethiopia affect project debt financing accessibility?					
17	Do you agree that businesspersons are not willing to accept project loan with short maturity and narrowed repayment frequency?					
18	Should collateral be fronted as one of the main requirements for access to project debt financing and the maximum project loan you can access from bank depends on the size of you collateral?					
19	Banks dependency on profitability and credit history of private business are a challenge for accessing project debt financing.					
20	Do you think that financial regulatory organ rules and regulations determine accessibility of project debt financing?					
21	It is argued that current aggressive bank branch expansion strategy and stiff competition between banks enhance accessibility of project debt financing?					

PART THREE

This section is intended to collect methodical data about research problem. I kindly request you to provide elaborate responses to the queries below.

22. What measures have financial institutions put in place to enhance accessibility or private project debt financing?

23. What measures have the financial regularoty organ put in place to enhance accessibility or private project debt financing?

Thank you !!

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ፕሮጀክት ማኔጅመንት እና ፋይናንስ

ቃለመጠይቅ

ስሜ አማኑኤል መንገሻ ሲሆን የጂማ ዩኒቨርሲቲ የቢዝነስ እና ኢኮኖሚክስ ኮሌጅ የፕሮጀክት ማኔጅመንት እና ፋይናንስ የሁለተኛ ዲግሪ ተማሪ ነኝ። ለመመረቄያ ጥናት ማሟያ የግል ፕሮጀክት ማስፈጸሚያ ብድር ተደራሽነትን የሚወስኑ ሁኔታዎች በኢትዮጵያ - የደቡብ ምዕራብ ኢትዮጵያ ላይ ያተኮረ በሚል የጥናታዊ ፅሁፍ ርዕስ የመመረቄያ ጥናት በመስራት ላይ ነኝ። ለዚህም ጥናት ግብአት ይሁነኝ ዘንድ ከዚህ በታች የተቀመጡትን መጠይቆች በእውቀቶች እና በልምድ ያካበቱትን ከጥናታዊ ፅሁፍ አላማጋር የተያዙ ጥያቄዎችን በነፃነት ለምንም ቁጥብነት እንዲሞሉ አቸው በአክብሮት እየጠየኩ የሚሰጡኝ ምላሽ ስጠፈው ይከብሩ ተኛ ደረጃ የተጠበቀ መሆኑን እያረጋገጥኩ የተሞላውን መጠይቅ ለአጥኚው ወይም ለመረጃ ሰብሳቢ እንዲሰጡልኝ በአክብሮት እጠይቃለሁ።

ለሚያደርጉልኝ ቀናት ብብርክልብ አመሰግናለሁ።

ክፍል አንድ: አጠቃላይ የስራ ዘርፍ መረጃ

- የንግድ ስራ ስያሜ _____
- የንግድ ምስረታ ዓይነት (አንዱን ይምረጡ)

<input type="checkbox"/> የግል ወይም የቤተሰብ ንግድ	<input type="checkbox"/> የሽርክና ንግድ
<input type="checkbox"/> ኃላፊነቱ የተወሰነ የግል ማህበር	አክ <input type="checkbox"/> ንግህበር
- የንግድ ስራ ፍቃድ አለዎት?

<input type="checkbox"/> አዎን	<input type="checkbox"/> አይደለም / የለም
------------------------------	--------------------------------------
- ድርጅቶች ወይም የንግድ ተቋሞች ለስንት ዓመት ስራ ላይ ቆይቷል? (አንዱን ይምረጡ)

<input type="checkbox"/> ከአንድ ዓመት በታች	<input type="checkbox"/> ከ አንድ እስከ አምስት ዓመት
<input type="checkbox"/> ከስድስት እስከ አስር ዓመት	<input type="checkbox"/> ከአስራ አንድ እስከ አስራ አምስት ዓመት

ከአስራአምስትዓመትበላይ

5. ድርጅቶችበሙያወ.ዕ.ወ.ቀትእናልምድባለወ.ሰወ.ነወ.የሚመራው

አዎን አይደለም /የለም

6. ከላይየጥያቄቁጥር

5

መልሶትአዎንከሆነየንግድተቋሞትስራአስኪያጅከፍተኛወያትምህርትደረጃይጥቀሱ
(አንዱንይምረጡ)

የመጀመሪያደረጃ ሁለተኛደረጃ
 የኮሌጅ/ዩኒቨርሲቲዲፕሎማ የመጀመሪያዲግሪ
 ሁለተኛዲግሪ /ማስተርስ/ ለከሁለተኛዲግሪ /ማስተርስ/ በላይ

7. ከላይየጥያቄቁጥር

5

መልሶትአዎንከሆነየንግድተቋሞትስራአስኪያጅየስራለምድይጥቀሱ _____
___ዓመት

8. የንግድተቋሞት _____ /ፕሮጀክቶችከቅርብየፋይናንስድርጅትምንያህልይርቃል?
_____ ኪ.ሎሜትር

9. ድርጅቶች/የንግድተቋሞትበአሁንሰዓትያለወ.አጠቃላይሃብትስንትነው

ከ ብር 500,000.00 በታች ከብር 500,000.00 እስከብር 1 ሚሊዮን
 ከብር 1 ሚሊዮንእስከ 2 ሚሊዮን ከብር 2ሚሊዮን እስከብር 5 ሚሊዮን
 ከብር 5 ሚሊዮንእስከብር 10 ሚሊዮን ከ 10ሚሊዮን ብርበላይ

10. ከዚህቀደምከማንኛውምየፋናንስተቋምተበድረወያወ.ቃሉ?

አዎን አይደለም /የለም

11. ከላይ

10ኛ

ጥያቄመልስአዎንከሆነከፍተኛየወሰዱትየብድርመጠንስንትነው?(አንዱንይምረጡ)

ከ ብር 500,000.00 በታች ከብር 500,000.00 እስከብር 1 ሚሊዮን
 ከብር 1 ሚሊዮንእስከ 2 ሚሊዮን ከብር 2ሚሊዮን እስከብር 5 ሚሊዮን
 ከብር 5 ሚሊዮንእስከብር 10 ሚሊዮን ከ 10ሚሊዮን ብርበላይ

12. ለፕሮጀክትማስጨረሻ/ማስፈጸሚያብድርለመበደርፋይናንስተቋማትላይአመልክተወነበር?

አዎን አይደለም /የለም

13. የፋይናንስ ተቋማት ለብድር ጥያቄ ወመልስ ምንነበር ? (አንዱን ይምረጡ)

- ብድር ተፈቅዶ ተለቆልኛል የብድር ጥያቄ ወደ ቅሪት ላይ ላይ
- ብድር በሂደት ላይ ነው ሌላ: ይጥቀሱ _____.

14. ለብድር መያዣ/ዋስትና አድርገው ያቀረቡትን ብረት ግምት ምን ያህል ነው? _____ ብር

ክፍል ሁለት

ከታች የተቀመጡት ከብድር አቅርቦት ገንዘብ ስህተት ሁኔታዎች ጋር የተያያዙ ጥያቄዎች ሲሆኑ ከተቀመጠው ሃሳብ ጋር የሚስማሙበትን / የማይስማሙበትን ደረጃ ይግለጹ።

መግለጫ: በደንብ እስማማለሁ = 5 እስማማለሁ = 4 እርግጠኛ አይደለም = 0

አልስማማም = 2 በደንብ አልስማማም = 1

ተ. ቁ	ሀ	5	4	3	2	1
15	በኢትዮጵያ የብድር ላይ የሚታሰበው የወለድ ምጣኔ ከፍተኛ ነው በሚል ሃሳብ ይስማማሉ					
16	በኢትዮጵያ የብድር ላይ የሚታሰበው የወለድ ምጣኔ የፕሮጀክት ብድር አቅርቦትን ይደባል።					
17	የብድር መክፈት ለሀገር ጠቀሜታ አይደለም ለሀገር ጠቀሜታ የሆነን ብድር የንግድ ማህበረሰብ ለመውሰድ አይፈልጉም።					
18	ለብድር ዋስትና የሚቀርብን ብረት ለፕሮጀክት ብድር ለማግኘት እና ለሚሰጠው ብድር መጠን እንደቅድመ ሁኔታ ይጠየቃል።					
19	የፋይናንስ ተቋማት በተበዳሪ ገንዘብ ስህተት ስር እና የብድር ታሪክ ላይ ተመርኩዘው መስራት ለፕሮጀክት ብድር ተደራሽነትን ይወስናል።					
20	የመንግስት እና የፋይናንስ ተቋማት ለግንዛቤ ማስፈጸም ለሚያስፈልጉ ፕሮጀክት ብድር አቅርቦት ላይ ጫና አለው።					
21	በአሁኑ ወቅት የፋይናንስ ተቋማት ተደራሽነት መስፋት እና የውድድር መጠን ከፍተኛ ፕሮጀክት ብድር አቅርቦትን ይጨምራል።					

ክፍል ሶስት

ከታች የተቀመጡትን ጥያቄዎች ላይ ያለዎትን ሃሳብ በተሰጠው ቦታ ላይ ይግለጹ።

22.

የፋይናንስ ተቋማት ለግል ፕሮጀክት ማስፈጸሚያ ብድር ተደራሽነት ማደግ ምን እርምጃ መውሰድ አለባቸው?

23.

የፋይናንስ ተቋማት ለግል ፕሮጀክት ማስፈጸሚያ ብድር ተደራሽነት ማደግ ምን እርምጃ መውሰድ አለባቸው?

አመሰግናለሁ።