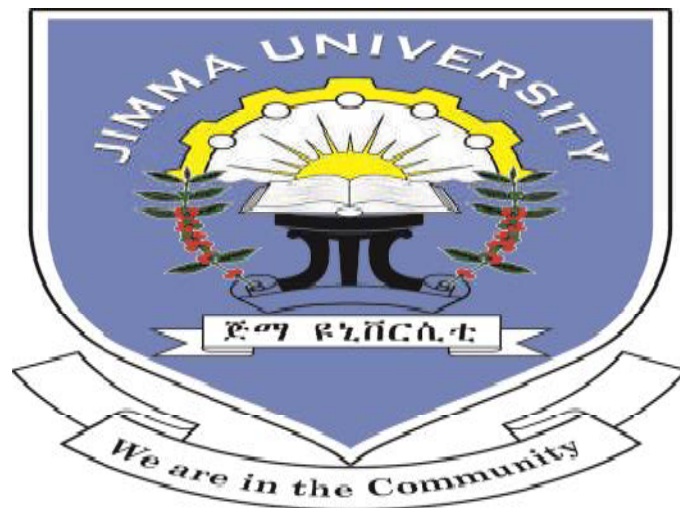


# **Factors Affecting Growth of MSEs in Jimma Town, Oromia Regional State**

*A Thesis Submitted to the School Graduate Studies of Jimma University in  
Partial Fulfillment of the Award of the Degree of Masters of business  
Administration (MBA)*

**By:**

**ASHIM KEDIR**



**MBA Program, Department of Management, College of Business and Economics,  
Jimma University, Jimma, Ethiopia  
September, 2018**

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Under the Guidance of

Mr. Gemechu Abdisa

and

Mr. Firew Mulatu



**MBA Program, Department Of Management, College Of Business and Economics,  
Jimma University, Jimma, Ethiopia**

**September, 2018**

## **ABSTRACT**

*The purpose of this study is analyzing the growth determinant factors in MSEs business focusing on the enterprises in Jimma town particularly those stayed in the industry five years and above by taking simple random sampling of 113 MSEs as sample enterprise out of 308; applying explanatory research and the binary logistic regression analysis of the external and internal factors affecting employment growth. Entrepreneurial/managerial training before starting the business, ownership type, sector type of enterprise and amount of initial capital are the internal independent variables. Likewise the external independent variables are existence of external financial/credit source and access to business services. The descriptive analysis indicated better growth by Cooperative (23.9%) from the total ownership under investigation, service sector as the best growing sector with 78.3% within the service sector and 16.5% within the growing enterprise from the five sectors. MSEs given prior training and special practical training on the work as well as those possess credit source showed better growth. The result of Pearson correlation shows positive correlation between the dependent variable and independents with the correlation strength weak to moderate. Basic logistic regression assumptions and goodness of fit check conducted. Logistic regression analysis shows ownership type, amount of initial capital and existence of external financial/credit source are significantly contributed to the employment growth at 5 percent significance level. The greater the amount of initial capital, the more is employment growth. Similarly MSEs those have credit source and those engaged in cooperative type showed more growth than those with no credit source and engaged in sole proprietorship and partnership respectively. So, as this study it is better to make easy and flexible the access to credit source with providing the appropriate capital amount according to the environmental context for all either sole proprietorship, partnership or cooperative.*

**Key words:** *employment, enterprise, external factors, growth, internal factors, Micro, small*

## **DECLARATION**

I declare that the thesis entitled: “Factors Affecting Growth of MSEs in Jimma Town, Oromia Regional State” submitted to research and postgraduate studies’ office of Business and Economics collage is original and it has been not submitted previously in part or full to any university or other funding organizations.

Researcher’s Name

Date

Signature

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## CERTIFICATE

We certify that the thesis entitled “Factors Affecting Growth of MSEs in Jimma Town, Oromia Regional State “submitted to Jimma University for the award of the Degree of Master of Business Administration (MBA) is developed by Mr. Ashim Kedir under our guidance.

Mr. Gemechu Abdisa

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Main Advisor

Signature

Date

Mr. Firew Mulatu

\_\_\_\_\_

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Co-Advisor

Signature

Date

## **ACKNOWLEDGMENT**

Foremost, I would like to express my sincere gratitude to my main advisor Mr. Gemechu Abdisa for the continuous support of my study, for his patience, motivation, enthusiasm and immense knowledge. His guidance helped me in all the steps starting from my proposal writing to the thesis report submission. My special thanks also go to my Co-advisor Firew Mulatu for his assistance and experience sharing and commenting my work.

I would like to thank Jimma University, Management Department for arranging such program and giving me this golden opportunity to exercise the identification of the prevailing constraints in relation to my academic professional and propose it for the concerned bodies. My thanks also go to the Post Graduate Research and Post graduate studies Office of Business and Economics College for their cooperation and willingness to take part in arranging favorable environment for the directing students and scheduling accordingly.

Further, I would like to express my gratitude to the communities/employees in the Post Graduate Internet service for their patience full while providing service for my data gathering, timely downloading information available on the web.

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## **APPROVAL SHEET OF THESIS**

As members of the Examining Board of the Final Open Defense, we certify that we have read and evaluated the thesis prepared by Ashim Kedir, entitled “Factors Affecting Growth of MSEs in Jimma Town, Oromia Regional State”, and recommend that it be accepted as fulfilling the thesis requirements for the award of the degree in Master of Business Administration.

Name of Chairman	Signature	Date

Name of Internal Examiner	Signature	Date

Name of External Examiner	Signature	Date

# TABLE OF CONTENTS

ABSTRACT .....	III
DECLARATION.....	IV
CERTIFICATE.....	V
ACKNOWLEDGMENT .....	II
APPROVAL SHEET.....	V
TABLE OF CONTENTS/LIST OF TABLES .....	VII
LIST OF TABLES.....	X
LIST OF FIGURES .....	XI
ACRONYMS .....	XII
CHAPTER ONE	
INTRODUCTION.....	1
1.1    BACKGROUND OF THE STUDY .....	1
1.2    STATEMENT OF THE PROBLEM.....	2
1.3    OBJECTIVE OF THE STUDY .....	5
1.4    SIGNIFICANCE OF THE STUDY.....	5
1.5    SCOPE OF THE STUDY .....	6
1.6    ORGANIZATION OF THE PAPER.....	7
1.7    OPERATIONAL DEFINITIONS OF VARIABLES .....	6
CHAPTER TWO	
LITERATURE REVIEW .....	8
2.1    THEORETICAL REVIEW .....	8
2.1.1    Capitalism versus socialism.....	8
2.1.2    Classical and Neoclassical views of growth .....	8
2.1.3    Resource Based View .....	10
2.1.4    The New Theories of Growth .....	11
2.1.5    The Concept of Firm Growth.....	12
2.1.6    Growth of Small Business .....	13
2.1.7    Definition and Features of MSE .....	14
2.1.8    The Revised Definition of Micro and small Enterprises in Ethiopia.....	15
2.1.9    Overview of Variables Used in this Study .....	16



2.1.10	The role of MSE.....	20
2.1.11	Challenges of MSE in Ethiopia.....	21
2.2	EMPIRICAL STUDIES.....	22
2.3	RESEARCH GAP.....	24
2.4	CONCEPTUAL FRAME WORK.....	25
 CHAPTER THREE		
RESEARCH METHODS	.....	27
3.1	DESCRIPTION OF THE STUDY AREA.....	27
3.2	RESEARCH DESIGN .....	27
3.3	TARGET POPULATION .....	27
3.4	SAMPLING TECHNIQUE .....	28
3.5	SAMPLE SIZE DETERMINATION .....	28
3.6	MEASUREMENT VARIABLE .....	29
3.7	METHOD OF DATA ANALYSIS .....	30
3.8	MODEL SPECIFICATION .....	31
3.9	VALIDITY AND RELIABILITY ISSUES .....	32
3.9.1	Validity .....	32
3.9.2	Reliability.....	33
3.10	MODEL FIT TEST.....	33
3.11	ETHICAL ISSUES.....	34
 CHAPTER FOUR		
DATA PRESENTATION, ANALYSIS AND INTERPRETATION.....		36
4.1	DESCRIPTIVE STATISTICS.....	36
4.1.1	Demographic information.....	36
4.1.2	Descriptive Analysis of Growth Determinant Factors .....	37
4.1.3	Mean score measurement of the Growth determinant factors .....	43
4.2	ASSOCIATION BETWEEN INDEPENDENT AND DEPENDENT VARIABLES.....	44
4.3	LOGISTIC REGRESSION ASSUMPTIONS.....	46
4.4	GOODNESS OF FIT TEST.....	55
4.5	IDENTIFICATION OF SIGNIFICANT PREDICTORS AND COEFFICIENTS FROM THE LOGISTIC REGRESSION OUTPUT .....	58
4.6	INTERPRETING THE LOGISTIC REGRESSION RESULTS IN RELATION TO THE RESEARCH QUESTIONS.....	60
 CHAPTER FIVE		
SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION.....		63

5.1. SUMMARY OF FINDINGS .....	63
5.2. CONCLUSION .....	65
5.3. RECOMMENDATION .....	66
5.4. LIMITATION OF THE STUDY .....	67
5.5. DIRECTION FOR FURTHER RESEARCH.....	67
REFERENCES .....	68
APPENDIXES .....	75

## LIST OF TABLES

Table 1: The Revised Definition of Micro and Small Enterprises .....	16
Table 2: The MSEs Sectors and subsectors .....	17
Table 3: Measurement variables .....	29
Table 4: Frequencies and Percentages Distribution of Respondents' Demographic Information .....	37
Table 5: Employment growth among business ownership type .....	38
Table 6: Descriptive analysis of employment growth within a sector type .....	39
Table 7 Descriptive analysis of Employment growth as affected by owners/managers training before starting the business and possible business service attained after engagement .....	40
Table 8: Descriptive statistics of Employment growth as influenced by the Existence of Credit source and Amount of initial capital .....	42
Table 9: Mean score of the Employment growth determinant factors .....	44
Table 10: Pearson correlation matrix .....	45
Table 11: Logistic Regression Linearity Test Using the Interaction of IDV with its Natural Logarithm .....	47
Table 12: Collinearity Statistics .....	49
Table 13: Omnibus Tests of Model Coefficients .....	56
Table 14: Hosmer and Lemeshow Test .....	56
Table 15: Model Summary .....	57
Table 16: Classification Table .....	57
Table 17: Results of Binary Logistic Regression Analysis .....	60

## LIST OF FIGURES

Figure 1: Conceptual Frame work .....	26
Figure 2: Histogram shows of the probability of events occurrence .....	48
Figure 3: Residual graph shows of Outliers and influential cases in Logistic Regression .....	51
Figure 4: Cook's Distance shows of influential cases .....	52
Figure 5: Scatter plot shows of Leverage Values .....	53
Figure 6: Scatter plot of Deviance values .....	54
Figure 7: Scatter plot of standardized residual .....	55
Figure 8: ROC shows of True positive and True Negative .....	58

## ACRONYMS

EEA	Ethiopian Economic Association
EPA	Environmental Protection Agency
ETB	Ethiopian Birr
FDRE	Federal Democratic Republic of Ethiopia
FOS	Financial Ombudsman Service
GDP	Gross Domestic Product
GTP	Growth and Transformation Plan
IISD	International Institute for Economic Development
ILO	International Labor Organization
JMSEDO	Jimma Town Micro and small enterprise development office
LED	Local Economic Development
MFI	Micro Finance Institution
MoFED	Ministry of Finance and Economic Development
MoUDH	Ministry of Urban Development and Housing
MSE	Micro and Small Enterprise
MSEDA	Micro and Small Enterprise Development Agency
MSME	Micro, Small and Medium Enterprise
NRMED	Natural Resource Management and Environment Department
OECD	Organization for Economic Cooperation and Development
SEAANZ	Small Enterprise Association of Australia and New Zealand
TOC	Theory Of Constraints
UNDP	United Nation Development program
UNIDO	United Nations Industrial Development organization
USAID	United Sates Agency for International Development
USD	United States Dollar
WBG	World Bank Group
WES	World Bank Enterprise Survey

# CHAPTER ONE

## INTRODUCTION

This chapter deals with background of the study, statement of the problem, research questions, and objectives of the study, significance of the study, scope of the study and organization of the paper. It contains the description about what the study is, what problem is there and what type questions may be raised from this problem as well as the practical relevance of answering this question is stated.

### 1.1 Background of the Study

Social, economic and environmental contributions of MSE frequently explained enough by scholars around the web. Across high-, middle- and low-income countries, micro and small enterprises (MSEs) constitute the largest share of private-sector enterprises and account for the bulk of employment, at least in low and middle income countries. Even though large shares of these MSEs are informal, they are also accountable for most of the job creation in low- and middle-income countries (Reeg, 2015).

Micro and small or medium-sized enterprises (SMEs) make important contributions to development. The growth of a healthy, competitive SME sector will be maximized when there is a strong enterprise culture in the society at all levels; a continuous growth in the quality stock of independent business; maximum potential for growth of existing small businesses: and a highly supportive economic, social and stakeholder environment (OECD, Effective Policies For Small Business, 2004). MSMEs have been identified as a high potential sector for employment generation and provision of livelihood to millions of people in several countries (Koshy and Prasad, 2007).

As described in the study of Engida *et al*, (2017) tackling issues of unemployment and poverty through the support and promotion of large-scale manufacturing industries has repeatedly failed to achieve the required results in Ethiopia. Some argue that focusing on small businesses, which require relatively less financial and human capital and are able to absorb a significant portion of the labor force, will provide the solution. Despite their large employment contribution, MSEs are characterized by low productivity and constitute an insignificant share of the commercial output in most African economies(Yoshino, 2011) as cited in(UNIDO, 2016).

Even though many studies are conducted on this area, the magnitude of the problem factors and the relative impacts of the determinant factors of growth is still unknown in many parts of the country. This means as in problem statement part of this study in detail, different Authors arrive at different results when studying to know the determinant factors of MSEs growth which allow to say these factors contribute differently from place to place. Various scholars arrived at that the same external factor contribute differently for MSEs growth depending on the geographical difference. Despite the MSEs social, economic and environmental contributions, in Jimma town the analysis based study on the determinant factors of growth of MSE is limited, no more investigation conducted to the point of this. The purpose of this study is then analyzing the growth determinant factors in MSEs business focusing on the enterprises in Jimma town, using the binary logistic regression analysis of the external and internal factors.

## **1.2 Statement of the problem**

Even though the MSE sector have great roles in changing peoples' living conditions, the activities of the sector was constrained by many factors like lack of financial capacity, lack of working and production places, rules and regulatory procedures, lack of capacity to compete larger enterprises, and insufficiency of business development socio-economic infrastructures (Shiferaw, 2013). But, their influence on business is different from study to study and place to place as they are conducted in different regions of Ethiopia and except little of them, the studies conducted lack the attribution of the magnitude by which they influence the business (here it needs to understand that I am talking in the context of materials used in this study, specially in this part of the study).

For instance, as the study of Ababiya *et al*, (2015), the experience of the managers of the enterprises, access to training for the enterprises in different aspects and access to market for the products and services of the enterprises were statistically significant at less than 1% significance level and had positive relationship with the performance of the enterprises. But the Author doesn't explain how unit increase in each of these variable influence the performance. Similarly, Amha (2015) used a linear regression to estimate the relationship between growth of youth-owned MSEs and various arrays of independent variables. These are:- MSEs operators who are illiterate, sole owner of the business, enterprise owners under the category of microenterprise, have experience in similar business (before starting their own business), and male MSE owners are found to have significant effects on the

employment growth. Additionally, availability of stable product market, access to training before starting business, develop future plan, access to loan, developed the culture of saving, size of start-up capital, and current capital are found to be significant variables influencing the employment growth of MSEs. But doesn't put the magnitude by which these variables influence employment growth.

On the other hand, other scholars such as (Seyoum *et al*, 2016), (Shiferaw, 2013) and (Molla, 2016) are among those tried to attribute the magnitude by which independent variables may influence the growth of MSEs. MSEs that start operation with an initial investment size that ranges from birr 5000-10,000 shows the highest growth rate as compared to those start operation with an initial investment size that exceed 10,000 birr and engaged in Manufacturing sectors MSEs grow faster than those in service/ trade sectors (Woldeyohanes, 2014). As the study of (Seyoum *et al*, 2016), MSEs whose owners attained training, started business with high initial investment, engaged on the service sector, and established in non-cooperative form have better growth than those whose owners/operators did not attend training, who started with low initial investment, those engaged on production sector, and those working in cooperatives respectively.

As the average benefit cost ratio value of each sector were indicates the enterprises which were engaged in construction was higher benefit cost ratio value and service sector had lower benefit cost ratio from all five sectors that the enterprises were engaged ( Ababiya *et al*, 2015).In addition, MSEs that have no access to credit are rapidly growing than those of MSEs having access to credit (Haile *et al*, 2014). The highest growth is observed in the metal and woodwork subsector, followed by textile and clothing, leather and leather products, and food and food products. The lowest growth rates are reported in trade, urban agriculture, construction and service as well as there are no differences in the growth rate between the youth MSE operators who took training and those who did not receive training before starting their business besides those organized in the cooperatives or groups and get support from government experiences lower growth rates compared to the other form of ownership arrangements (Amha, 2015).

Another study revealed strong inverse relationship between the growth of enterprises and constraints such as Limited access to finance, limited access to business services and limited access to market (Molla, 2016). Moreover, key success factors tend to be personal qualities such as having an articulate vision or ambition and innate abilities, working experience in the



formal sector as a factory employee or having worked in family businesses, managerial and entrepreneurial skills and higher equity in the invested money (Assefa *et al*, 2014). Testing the importance of the saving constraints, (Abebe *et al*, 2016) conclude that while financial literacy training alone seemed ineffective, we find that reminders and joint treatment encouraged better saving behavior.

In general the output of the above studies can be attributed to individual level factor (training), firm level factor (size of initial capital, sector type, ownership type) and factors external to the firm (financial/credit related, government related) factors. In simple words, the factors explained above as affecting the growth of MSEs are:- owners' training before starting the business, the amount of initial capital, sector type, business ownership type, the existence of credit source and business service attained by the enterprises. The need of knowing the influence of different factors on MSEs growth is used to give priority to work on the most determinant factor to sustain the growth of the sector.

In order to confirm the prevailing difference in determining the most important factors, conducting another analysis in this area is mandatoy. There fore, the existance of this gap realizes the relevance of conducting this study with greater emphasis to analyze the determinants of growth of MSE in Jimma town in view of evaluating from external and internal factors.The internal factor directly related with entrepreneurial/owner/management characteristics (impact of prior training), and firm characteristics (type of sector, amount of initial capital invested and ownership type). External factors used will be access to business services and access to external financial/credit sources. Based on these factors research questions developed after searching of many related references. Like that questions to be answered through this work are;

1. How entrepreneurial/owner/management characteristics (prior training) impact the growth of MSEs?
2. Does firm characteristics (type of sector, amount of initial capital invested and ownership type) discrepancy matter on MSEs growth (number of employment)?
3. Is there growth problem as enterprises exposed to the same external factors (possible business service and external financial source (credit source) differently? That means is there any business service for the MSEs and does the absence of this influence growth? Does the effect of external financial sources influencing the business growth?

### **1.3 Objective of the study**

#### ***General objective***

The general objective of this study is to analyze the determinant factors of growth of MSEs business in Jimma Town.

#### ***Specific objectives***

Under this general objective other specific objectives of the study are:

- To analyze the impact of owners'/managers' training of prior business engagement on the growth of MSEs
- To examine the impact of the firm characteristics difference on the growth of MSEs
- To investigate the growth change with firms exposure to external factors differently

### **1.4 Significance of the study**

The outcome of this study may have practical relevance for the society particularly in Jimma town those engaged in small business.

- ⇒ The generalization from the study may serve MSEs in the other part of the country. It may be input for the Jimma town Micro and small Enterprise Office to sustain factors those their contribution shows growth and find solution for factors those their contribution is hindering growth. Specifically; For MSEs, this study offers alternative actions to counteract against to the problems identified. For instance it helps MSEs owners to create better relationship with credit source/institutions and banks to solve their credit problem.
- ⇒ For the new comers it provides information on the need of initial capital to handle the higher initial capital amount as well as to start their business in cooperation.
- ⇒ For financial institutions it may give the credit needs of MSEs and direct them give emphasis to the credit system of their organization and update their lending schemes such as interest rate charged, loan application process and reforms on maximum amount of capital for a given enterprise.
- ⇒ Additionally the outcome of this research may become input for the government to make easy and flexible the access to credit source for all enterprise, adjust the credit service with environmental context and work in providing the appropriate capital amount according to the environmental context.
- ⇒ Moreover, it informs the concerned bodies of the government to advocate adequate provision of finance to MSE development programs and specialized microfinance services that benefit MSE development. It helps also to work in initiating specialized

lending services to MSE in the existing microfinance institutions incorporating different fund raising programs such as Government sponsored programs for delivering credit and equity funds of MSEs.

⇒ It fore wards the message for the coming researcher in this area especially in Jimma town. It directs the future researchers to investigate focusing on both sales growth and capital growth separately or both variables at once to measure MSEs growth and incorporate employment growth to compare the three dependent variables when exposed to the same independent variables.

### **1.5 Scope of the study**

As in Kothari (2004) the scope of the study may be taken in terms of geography, research design, time, type of information and subject matter.

Geographically, this study is limited to the MSEs in Jimma town. The information was gathered from enterprises those stayed five years and above in the business practice. With the concern of time horizon the study is cross-sectional (one time) study which is limited to November, 2017 (the starting time of proposal writing) to June, 2018 (end of the research work). But because of the financial problem encountered the researcher, end of the research work extended to September 7/2018. Another important thing is the type of information we interested in with this study which is owners/managers training history, ownership type, information of initial capital, sector type, major financial/credit sources available for MSEs and possible business service attained by enterprises. Again the categorical nature of the study makes me to use only binary logistic regression for analysis of the determinant factors.

### **1.6 Operational definitions of variables**

According to the terms and concepts given by MSE strategy of 2011 and MoUDH (2016)

**Enterprise:** an undertaking engaged in production and/or distribution of goods & services for commercial benefits, beyond subsistence (household) consumption at the household level. An enterprise might be owned and operated by a single household, or by several households jointly on a partnership basis or by any institutional body.

**Micro Enterprise:** when the numbers of its employees (including the owner or family) are not greater than 5 & total asset is  $\leq 100,000$  ETB for industrial sector and  $\leq 50,000$  ETB for service sector.

**Small Enterprise:** an enterprise with 6-30 employees & total asset 100,001 to 1,500,000 ETB for industrial sector and 50,001 to 500,000 ETB for service sector.

**External finance:** the sources of finance that are generated in from of debt from formal financial institutions like bank and micro finance institutions or from informal Iqub, Idir, family, Arata and other sources.

**Initial Capital:** is defined here as “the original investment or money used to start the enterprise”. These initial funds, or capital, may come from microfinance loan, city government grant, owner's personal savings, or any other relatives and family contributions.

**Current capital:** is the part of enterprise’s capital available during the survey. Usually it is understood as a current asset minus current liabilities.

**Growth factors:** both the internal and external factors that affect the employment growth of MSEs.

**Micro finance:** refers to the provision of financial services to low-income clients, including consumers and the self-employed (Ethiopia Ministry of Trade and Industry, 2003).

### **Employment Growth**

Employment growth is an increase in size/number of employment (the employee engagement into the business. It is the difference between current number of employment and initial number of employment

**External Business Services:** the service given to enterprise such as business advice, short-term training and special practical training

**Sector Type:** the MSEs broad sectorial classifications (industry and service) and under this umbrella there are subsectors of the manufacturing, construction, trade, services and agricultural sectors that have a propensity to create large scale employment

**Ownership type:** the legal form for the business ownership which is; sole proprietorship, partnership, or corporation

## **1.7 Organization of the Paper**

The study was organized in to five chapters. The first chapter presents the introduction part which contains background of the study, statement of the problem, objective of the study, significance of the study and scope of the study. The second chapter insights literature review which is about a conceptual, theoretical and empirical aspect of the study. While the third chapter contains description of study area, brief description of the research design, as well as the methods in which the data were collected, presented and analyzed. The fourth chapter was presented analyzes and interprets the data related to the objective of the study. Finally, the fifth chapter summarizes, recommended and suggests possible solutions for identified problems of employment growth.

# CHAPTER TWO

## LITERATURE REVIEW

This chapter contains theoretical review, empirical review, and conceptual frame work and research gap. under theoretical review capitalism versus socialism, classical and neoclassical views of growth, resource based view, the new theories of growth, the concept of firm growth, growth of small business, definition and features of MSEs, the revised definition of micro and small enterprises in Ethiopia, overview of variables used in this study, the role of MSEs and challenges of MSEs in Ethiopia were found.

### 2.1 Theoretical Review

#### 2.1.1 Capitalism versus socialism

The greatest improvement in the productive power of labor and the greater part of the skill, dexterity and judgment with which it is anywhere directed or applied seem to have been the effects of the division of labor (Adam Smith, original work printed, 1776).

A couple of decades later, economic development and growth are key themes in the studies of Karl Marx. He considers production to be interwoven with reproduction, distinguishes saving from consumption and accounts for depreciation and technological progress to develop a model of physical capital accumulation (Marx, 1872) cited in the work of (Sardadvar, 2011). In this model, one part of the surplus value created in one period is consumed, while the other part becomes next period's capital; thus concluding that after each turn, "capital has produced capital".

The major weakness of the early theories is that they focused on finding the constraints in capital formation of one factor, such as physical capital or human capital that limit economic growth. Hence, their solution is simply to increase investments in the factor identified (Dang and Pheng, 2015).

#### 2.1.2 Classical and Neoclassical views of growth

Solow considered labor, capital and technology as factors of output growth: as his growth model stresses increases in labor quantity and quality (through population growth and education), increases in capital (through savings and investments) and improvements in technology would play to output growth (Solow, 1956).

Opposing to this approach Parker described the detail of growth rate by reviewing Romer's theories of endogenous growth. As he put the concept of "diminishing marginal returns" and

decreasing returns to scale.” The former is usually applied to changes in only a single factor of production holding all other factors constant. Thus, diminishing returns to capital means that when more capital is added to production with all other factors held constant, the ensuing increase in output becomes smaller as more and more capital is added. Returns to scale usually apply to the effect on output of simultaneous changes in many or all factors of production. “Constant returns to scale” by itself means that increases of an equal percentage in all factors leads to an increase of the same percentage in output (Parker, 2012). Because growth rates are taken to be exogenous in the Solow and Ramsey models, these theories are unable to explain why growth rates (and, in particular, the rate of technological progress) might change from one time period to another. Second failing of neoclassical growth theory is that it cannot explain the large and lasting differentials in per-capita income that we observe across countries and regions. Solow’s growth model implies more rapid convergence of incomes than seems actually to have occurred, particularly between developed and developing countries. International differences in technological capability can help explain this gap, but beg for an economic explanation that cannot be provided by models in which technology is exogenous. Working to show the condition of (ratio of the size of the labor force to the population conclude that increases in education have ambiguous effects on output per person. They increase output per worker but decrease ratio of workers to persons.

The main element behind the convergence result in neoclassical growth models is diminishing returns to reproducible capital. Poor countries, with low ratios of capital to labor, have high marginal products of capital and thereby tend to grow at high rates.’ This tendency for low-income countries to grow at high rates is reinforced in extensions of the neoclassical models that allow for international mobility of capital and technology (Barro, 1991).

Unused and underutilized productive services of resources are a key source of firm expansion, learning, innovation, and profitable growth. Managerial capability is the binding constraint that limits the growth of the firm the so called Penrose effect or Penrose theorem (Penrose, 1959) as reviewed by (Kor, Mahoney, Siemsen and Tan, 2016).

As Harrod said on the trade cycle theory, Trade-cycle theory is only a part of dynamic theory. "The interaction of the ' multiplier ' and ' accelerator ' " as commonly interpreted comprises a pattern of short-period behavior; this has its long-period counterpart. Analogous to the contrast between short-period and long-period costs is a contrast between the short-period multiplier and the long-period multiplier and between the short-period accelerator and the long-period accelerator. In trade-cycle analysis we may be especially concerned with the short period; but the long-period interaction may also have its influence on the short period,

as will presently appear. Both kinds of interaction are derived from what, for want of a better word, I propose to call the basic dynamic “antinomy.” This can be expressed in two propositions. The amount of saving provided, both in the short and long runs, depends primarily, although not solely, on the level of real income and The amount of saving required, both in the short and long runs, depends primarily, although not solely, on the rate of increase of real income(Harrod, 1951).

### 2.1.3 Resource Based View

Scanning and analyzing the external environment for opportunities and threats is not enough to provide an organization a competitive advantage. Analysts must also look within the corporation itself to identify *internal strategic factors*—critical *strengths and weaknesses* that are likely to determine whether a firm will be able to take advantage of opportunities while avoiding threats. This internal scanning, often referred to as organizational analysis, is concerned with identifying and developing an organization’s resources and competencies (Wheelen and Hunger., 2012).

The resource-curse hypothesis seems anomalous as development economics, since on the surface it has no clear policy implication but stands as a wistful prophecy: Countries afflicted with the “original sin” of resource endowments have poor growth prospects. The danger of such ostensibly neutral ruminations, however, is that in practice they may influence sectorial policies. Minerals themselves are not to blame for problems of rent-seeking and corruption. Instead, it is largely the manner in which policymakers and businesses *view* minerals that determines the outcome. If minerals are conceived as fixed stocks, and mineral abundance as a “windfall” unconnected to past investment, then the problem becomes one of divvying up the bounty rather than creating more bounty. Minerals are not a curse at all in the sense of inevitability; the curse, where it exists, is self-fulfilling (Wright and Czelusta, 2004).

The theory of constraints **is** an extension of Optimized Production Technology. According to the TOC, a system’s output is determined by three kinds of constraints: internal resource constraint, market constraint, and policy constraint. An internal resource constraint is the classic bottleneck that the gap between planned and actual benefits is caused by internal barriers. A market constraint results when market demand is less than production capacity. Since companies do not want excess inventory buildup, the market determines the rate of production. Policy constraint means that a specific policy dictates the rate of production (for example, a policy of no overtime) (Reid and Sanders, 2013).

In terms of applying a product-market theoretical framework to an agricultural primary production context this may cause problems due to the homogeneity of agricultural products. To determine competitive advantages of firms, which produce a very similar or sometimes identical product, may be difficult using a product-market side approach. However, the resource-based view may provide a tool for analyzing a firm's competitive advantages from a resource position. The resourced-based view of the firm conceptualizes the firm as unique bundles of productive resources which managers utilize (Lockett and Wild, 2014) cited in (Alvemar, 2015).

Research on strategy divides into two schools: content and process. The content driven school represents the view of strategy which focuses on the development of competitive superiority. It is strongly influenced by concepts of equilibrium, stability and control developed in the field of economics. According to the assumptions of economic rationality companies are rent-seeking systems which aim to achieve a set of objectives, with profit maximization traditionally or shareholder value maximization more recently foremost (Zahn, 1976). In this context there is the market-based view developed from the structure-conduct-performance paradigm and strongly influenced by Porter's theories of position and market power and the other approach is based on the resource-conduct-performance paradigm, which can be traced back to the work of Penrose and has been developed into what has become termed the resource-based view.

#### **2.1.4 The New Theories of Growth**

According to some of the knowledge based views to remain competitive, organizations must create and use new knowledge. However, the current practices in knowledge acquisition, utilization, and management are mostly limited to capturing, recycling, and deploying the existing information, and making it available on a technology platform. This is done with the hope that individuals will not only use the information made available to them, but will also voluntarily contribute to the growth of the organization's knowledge pool. Most organizations are also woefully reluctant to realize that knowledge obsolescence is inevitable, and that the knowledge based on organizational consensus or common wisdom based on collective experiences can be wrong (Sheikh, 2008).

OECD science, technology and industry policies should be formulated to maximize performance and well-being in "*knowledge-based economies*" – economies which are directly based on the production, distribution and use of knowledge and information as well as the distribution of knowledge. This is reflected in the trend in OECD economies towards growth



in high-technology investments, high-technology industries, more highly-skilled labor and associated productivity gains. Although knowledge has long been an important factor in economic growth, economists are now exploring ways to incorporate more directly knowledge and technology in their theories and models (OECD, *The Knowledge-Based Economy*, 1996).

The old foundations of success are gone. For all of human history the source of success has been controlling natural resources -- land, gold, oil. Suddenly the answer is "knowledge." The king of the knowledge economy, Bill Gates, owns no land, no gold or oil, no industrial processes. The knowledge-based economy is asking new questions, giving new answers, and developing new rules for success (Thurow, 1999).

Standard growth-accounting exercises provide useful information within the context of modern theories of endogenous growth and that the recent theories can be used to extend the usefulness of traditional growth accounting. Hence, the older and newer approaches to economic growth are complementary (Barro, 1999).

### **2.1.5 The Concept of Firm Growth**

The meanings of enterprise growth is the development process that enterprise keeps the tendencies of balanced and stable growth of total performance level (including output, sales volume, profit and asset gross) or keeps realizing the large enhancement of total performance and the stage spanning of development quality and level (Sun, 2004) as cited in (Mao, 2009).

*The Theory of the Growth of the Firm*, (Penrose, 1959) as cited in (Benzazoua *et al*, 2015), offered some strong principles governing the growth of firms and the rate at which firms can grow successfully. She claimed that firms are a bundle of internal and external resources that help a firm to grow and to realize a competitive advantage. According to Penrose, firm size is incidental to the growth process, whereas firm growth is determined by the effective and innovative managerial resources within the firm.

As the economic globalization and the process of system marketization go on, the competition in the global market becomes increasingly intense. Taking US with strong enterprise energy and competitive force as the example, in 100 strongest enterprises listed in Forbes in 1978, there were three of them to be bankrupted, and 35 of them to be purchased, and 30 of them which could not enter into the 100 strongest enterprises list of Forbes in 2006, and only 32 of them to be still on the list. In this period, 68% of past winners were eliminated from the list. It is obvious that the intense market competition and the survival press were so strong (Mao, 2009).

### 2.1.6 Growth of Small Business

(Schmitt-Degenhardt *et al*, 2002) put the growth in their study by introducing different established enterprise growth theories, focusing on static and dynamic concepts and internal and external reasons for SME growth. Static approaches consider “locally oriented SMEs” whose development strategy is limited to a certain area and is therefore a limit to its size, “arrested development” where the owner manager chooses to maintain the company size limited, the “life-style firm” which is just large enough to guarantee the owner-manager a quality of life, and the argument of formalization as an obstacle to further business growth. In El Salvador it was observed that while many micro enterprises seem to perform relatively well, slightly larger enterprises seem to show a relatively poorer economic performance: investment, turnover and the willingness to contract external services do not grow in line with a growing size of the enterprise. What was observed might be labeled a “growth gap”.

That among the entrepreneurs ‘characteristics influencing small firm growth, the most clearly influential propositions appear to center on growth motivation, level of education, previous experience with business ownership or management and willingness to team up with other entrepreneurs. Less clear-cut in terms of their association are the impact of the owner’s gender or ethnicity. Among the firm’s characteristics influencing small firm growth, propositions focusing on the sector in which the firm operates stood out in relation to its ability to influence firm growth. Less clear cut propositions surround the firm’s age, location, forms of ownership or employment levels. As far as management strategies or practices are concerned, the most clear-cut propositions on factors influencing small firm growth behavior would seem to include the ability to leverage external support and technical resources, as well as the firm’s ability to engage in long-range planning activities, develop distinctive marketing strategies and share equity with willing investors (Fadahunsi, 2012).

The sources of business growth have been subject to a considerable academic attention. At the same time, growth of sales is a normal aspect of the phenomenal growth of a company; using growth which has been based on the analysis of two terms: the average bill and the frequency of visits, and their impact on the overall sales growth. The identified key factors affecting growth of sales over time are: labor productivity (sales-per-worker), labor intensity (workers-per-assets), capital intensity (assets-per customer) and frequency of visits (customers per time unit) (Machek and Machek, 2014).

To measure the growth of MSE the (Evans, 1987) model of growth rate of MSE is being used in many current studies for instance Cabral and Mata (2003), (Haile *et al*, 2014) and (Seyoumet *al*, 2016), cited in their studies and used these model for the purpose of MSE growth confirmation. The model of this Author is computed according to the following;

$$MSE\ gr = \frac{\ln St' - \ln St}{Eag}$$

Where  $\ln St'$ =natural logarithm of the employment current size

$\ln St$ =natural logarithm of initial employment size

$Eag$ =enterprise age,  $Gr$ =growth rate

Cabral And Mata (2003) suggested that the distribution of the logarithms of firm size *of a given cohort* is much skewed to the right at time of birth, and gradually evolves towards a more symmetric distribution. In particular, the data are consistent with this distribution converging towards a lognormal distribution. The total firm size distribution, in turn, is fairly stable overtime and somewhat skewed to the right.

### **2.1.7 Definition and Features of MSE**

Despite the volume of SMEs definitions, there is a tendency to accept quantitative criteria, first and foremost the headcount or employee number criterion as the main determinant in categorizing SMEs. Also within this compromise, there is a tendency for definitions that outspread beyond border of a single country at a time when economic interaction between countries is intense (Berisha and Justina Pula, 2015).

Using principles of process management within SMEs has its limitations caused mainly by the size of the enterprise and the related focus on operational management. Other specifics are function accumulation, informal leadership, preference of oral communication to written, etc. Nevertheless, implementation of strategic management can increase competitiveness, reduce costs, improve decision-making, facilitate implementation of the employee motivation system, shorten delivery times, raise quality of customer satisfaction, etc.(Březinová, 2013). Following Storey (1994a)'s classification, as cited in (Carrizosa, 2007), firms can be divided into three groups: “failures”, “trundlers” and “flyers”. “Failures” are those firms that disappear after entering the market. “Trundlers” are firms that survive to the observed period

but do not significantly change size. “Flyers” are firms that really contribute to job creation and increase in size.

### **2.1.8 The Revised Definition of Micro and small Enterprises in Ethiopia**

Following the current MSE strategy of Ethiopia, MSEs are defined as follows. An enterprise is considered as micro if it is employing less than 5 people and has a total asset that is worth at most 100,000 ETB and 50,000 ETB if it is operating in the manufacturing and service sector, respectively (FDRE, Micro and Small Enterprise Development Strategy, Provision Framework and Methods of Implementation, 2011). An enterprise is considered as small if it is employing from 6 up to 30 people and have an assets that is worth at most 1.5 million ETB and 500,000 ETB if it is operating in the manufacturing and service sector respectively (FRDE, 2011).

Similarly on the document of MoUDH Second Edition March 2012, edit April, 2016, MSE defined according to the following.

#### ***The definition of micro enterprise***

Enterprises employing up to 5 persons including the enterprise owners and family members, with total assets of not more than ETB 100,000 (USD 4, 6303).

For the industrial sector (including manufacturing, construction and mining): Enterprises employing a maximum of five persons, including the enterprise owners and family members, with a total asset of not more than ETB 100,000 (USD 4,630); and

For the service sector (retail trade, transport, hotel, tourism, and information technology and maintenance services): Enterprises employing a maximum of five persons, including the enterprise owners and family members, with a total asset of not more than ETB 50,000 (USD 2,310).

#### ***The Revised Definition of Small Enterprises***

For the industrial sector (manufacturing, construction and mining): This refers to enterprises employing 6-30 persons and with a total asset of from ETB 100,001 up to ETB 1,500,000 (USD 4,630 up to USD 69,500); and

***For the service sector***(retail trade, transport, hotel, tourism, and information technology and maintenance services): This refers to enterprises that are employing 6-30 persons, and with total asset of at least ETB 50,001 and up to ETB 500,000 (USD 2,310 up to USD 23,150).

Table1: *The Revised Definition of Micro and Small Enterprises*

Level of enterprise	Sector	Head count staff	Total asset ETB	Total asset USD
Micro enterprise	Industry	<5	≤ 100,000	≤ 4,630
Micro enterprise	Service	<5	≤50,000	≤ 2,310
Small enterprise	Industry	6-30	100,001-1,500,000	4,630 - 69,500
Small enterprise	Service	6-30	50,0 01-500,000	2,310 - 23,150

Source: MoUDH (2016)

## 2.1.9 Overview of Variables Used in this Study

### Ownership type

One of the first decisions an entrepreneur faces when starting a business is selecting the form of ownership for the new venture. Too often, entrepreneurs give little thought to the decision, which can lead to problems because it has far-reaching implications for the business and its owners from the taxes the company pays and how it raises money to the owner's liability for the company's debts and his or her ability to transfer the business to the next generation. But there is no single "best" form of business ownership. Each form has its own unique set of advantages and disadvantages. The key to choosing the right form of ownership is to understand the characteristics of each business entity and to know how they affect an entrepreneur's business and personal circumstances (Scarborough, 2012).

The legal form for the business will affect initial capital requirement, ability to raise money, personal liability, how profits/losses will be reported and treated, the tax obligations the business will incur, the corresponding cash flow for the business, and how to conduct your business. This will give a good idea which legal form should be selected to start the business. It may take the form of a sole proprietorship, partnership, or corporation (Harper, 2005).

### *Sole proprietorship*

The sole proprietorships the simplest and most popular form of ownership. This form of business ownership is designed for a business owned and managed by one individual. The sole proprietor is the only owner and ultimate decision maker for the business. Its simplicity and ease of formation make the sole proprietorship the most popular form of ownership, comprising nearly 72 percent of all businesses in the United States. But as (Scarborough, 2012) describes, this form of business may encounter problems such as unlimited personal

liability, limited access to capital, limited skills and abilities, feelings of isolation and lack of continuity of the business.

### ***The Partnership***

A partnership is an association of two or more people who co-own a business for the purpose of making a profit. In a partnership, the co-owners (partners) legally share a business's assets, liabilities, and profits according to the terms of an established partnership agreement corporation

The corporation is the most complex of the three major forms of business ownership. A corporation is an artificial legal entity created by the state that can sue or be sued in its own name, enter into and enforce contracts, hold title to and transfer property, and be found civilly and criminally liable for violations of the law.

### **Owners/managers training**

As defined in the book of Management concept and Organizational Behavior, "Training is the act of increasing the knowledge and skills of an employee for doing a particular job." Training is the act of increasing the knowledge and skill of an employee for doing a particular job. It is concerned with imparting specific skills for particular purposes.

### **Sector Type**

In the report of MoUDH of Ethiopia MSEs divided into two broad sectorial classifications (industry and service) and under this umbrella there are subsectors of the manufacturing, construction, trade, services and agricultural sectors that have a propensity to create large scale employment (MoUDH, 2016).

Table 2: **The MSEs Sectors and subsectors**

<b>Manufacturing Sector</b>	<b>Service Sector</b>
Textile and garment	Rural and small scale transport services
Leather and leather products	Cafeteria and restaurant
Food processing and beverage	Warehousing services
Metal works and engineering	Tourist services
Wood works including furniture	Packaging services
Traditional handicrafts and jewelries	Management services
Agro processing	Municipal services
Construction materials production	Project engineering services
<b>Construction Sector</b>	Product design and development services
Contracting	Landscaping, urban greenery,
Sub-contracting	Security and cleaning services
Cobble stone works	Maintenance services
Sub-contracting for infrastructure construction	Beauty saloons
<b>Trading</b>	Electronics and software development
Wholesale of local products	Decoration services
Retail trade of local products	Internet café

Raw material supply  
Mining and Quarrying Sector  
Local mining works  
Precious stones

Garage and assembly works  
**Urban agriculture**  
Modern animal husbandry  
Beekeeping  
Poultry  
Modern afro-forestry  
Fruits and vegetables production  
Modern irrigation  
Animal feed processing

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Source: MoHUD (2016).

### **Initial Capital**

Initial capital is amount of investment capital owned from different sources of initial capital for enterprises which is essential for enterprises to start the business (Islam & Siengthai, 2010) (Islam and Siengtha, 2010). The amount of initial capital of enterprises during start-up of the business was statistically significant at less than 1% probability level and positively related with the performance of enterprises. The coefficient of variable indicates that a unit increase in the amount of initial capital of the enterprises increases the benefit cost ratio of the enterprises by 0.415 units ( Ababiya *et al*, 2015).

### **Employment Growth**

Employment growth is an increase in size/number of employment (the employee engagement into the business). Reeg (2015) describes employment growth as it can be used interchangeably with enterprise growth; after an increase in enterprise growth has occurred, three employment scenarios are possible: innovations within a firm can lead to firms expanding, stagnating or decreasing in employment

The employment size is preferred to measure the growth of MSEs since:

- ✓ Most MSEs operators/owners do not keep records so that it is difficult to get reliable time series data on growth of fixed assets/sales, they would be unable to report their sales or profits even at the present time. As most economic theory proves, increase in employment size is associated with increase in efficiency.
- ✓ Moreover, MSEs operators/owners are extremely reluctant to give accounting information to external parties (outsiders) (Fioritto & Lafarge, 1986) cited in (Haile *et al*, 2014).

### **External financial/credit sources**

External sources of finance defined as Venues for obtaining funds that come from outside an organization. External sources of finance might include taking on new business partners or

issuing equity or bonds to create long term obligation, or commercial paper to take on shorter term debt (businessdictionary.com/definition, 2018).

The obligations that financial providers have to their micro-enterprise customers could come from several sources including the terms of the contract, the duties associated with delivering the contract, the law, regulatory requirements and industry codes of good practice (FOS, 2015).

For most sole proprietorships, banks are the primary source of borrowed funds. However, there are limits to how much banks will lend a sole proprietorship, most of which are relatively small (Fabozzi and Peterson, 2003).

MSMEs are, collectively, the largest employers in many low-income countries, yet their viability can be threatened by a lack of access to such risk-management tools as savings, insurance and credit. Their growth is often stifled by restricted access to credit, equity and payments services (WES, 2013). As WES the smaller firms are less likely to have access to capital – a factor that constrains their ability to grow and become more productive. The finding indicated that; availability of collateral, MSE's age, Sector of the MSEs, Legal ownership, owner's or manager's age, owner's or manager's religion and Size of the MSE significantly determine access to bank credit at. It was also found that keeping accounting record, Sector, Legal ownership, owners or manager's age, owner's or manager's business experience and Size of the MSE significantly determine access to credit from MFIs. From supply side, high interest rate and long loan procedures are the main factors (Mersha and Ayenew, 2017).

### **External Business Services**

The MSE support has three critical elements: first the strategy espouses to create and implement an enabling legal framework. Second, it envisages establishing user friendly business environment, for example, by simplifying and standardizing of documents, processes and services. Finally, the government offers direct policy support by devising targeted and specific support programs such as access to finance, access to appropriate training and technology, marketing linkage, provision of physical infrastructures and access to working and selling spaces and other handholding supports as deemed appropriate (Assefa *et al*, 2014). As this study The industry extension service elements consist of entrepreneurship, business development services, production technique, marketing management, supplies management, book keeping and continuous productivity improvement or kaizen as well as government direct provision of various skill trainings to potential entrepreneurs of the sector.



New-startups need support at the start of their business. They need to be provided with skills and they have to be coached how to run their business. They also require information on sources of inputs, quality of inputs, and maintenance of business, market etc. Existing businesses often have adequate skills and information on the specific business they are engaged in (UNDP and MoFED, 2011).

Designers of enterprise development programs might want to segment the small enterprise sector according to certain variables to target those firms more likely to grow, or to match specific interventions and services to certain populations. Where firm growth is not the objective, programs could be designed with an explicit recognition of the important role survivalist MSEs play in maintaining employment and income among poor populations (USAID, 2005).

### **2.1.10 The role of MSE**

Globally, the small, micro and medium sized enterprise (SMME) sector generates substantial employment and economic output. These dynamic enterprises contribute to economic development in several ways: converting innovative ideas into economic opportunities, revitalizing social and productive networks, and increasing productivity (IISD, 2012).

As (FDRE, 2016) plan, 7.43 million Youth will be engaged in small and micro enterprises and 1.35 million youths will be organized and benefit from social cooperative associations. Also in terms of collaboration with other country, Enterprise development is the basic entry point of the LED program in Ethiopia. The purpose is to create employment and establish MSEs particularly for the vulnerable: the women, the youth and the disabled. The enterprise development has been able to create employment for 10 110 beneficiaries of the targeted groups (unemployed women, men, youth and vulnerable groups) and established or expanded 7715 micro small enterprises with a total budget of Birr89 831 664 (UNDP Birr 72 696 514 Local Budget 17 134 409) over the past two years (UNDP and MoFED, 2011).

As described in the study of (Engida *et al*, 2017) tackling issues of unemployment and poverty through the support and promotion of large-scale manufacturing industries has repeatedly failed to achieve the required results in Ethiopia. Some argue that focusing on small businesses, which require relatively less financial and human capital and are able to absorb a significant portion of the labor force, will provide the solution.

Unemployment is the headache for not only the developing countries but also for that of developed ones with the dramatically increasing population across the globe. This issue needs

quick response to control the problem behind. The MSEs are given priority in terms of employment creation over the world; this is clearly described in the report of International Institute of Sustainable development (the IISD report of 2012), the Ethiopian second GTP (FDRE, 2015) as well as the discussion paper of German Development Institute prepared by Reeg (Reeg, 2015), realizes this fact.

On the other hand when come to about the growth of this sector it is under question. For instance, in the current scenario, it becomes difficult to the SMEs to sustain and survive unless the costs are correctly accounted for, controlled and reduced so as to sustain and remain in the competitive world (Rakesh, 2014). Additionally in Ethiopia, the Ministry of Urban Development and Housing showed their ability to develop to the next business level along with those die out from this business (MoUDH, 2016). Similarly the Ethiopian Economic Association reported the declined GDP contribution of MSEs (EEA, 2015). The Ethiopian government focus was to create favorable condition for industry by promoting the development of MSEs to the medium and large scale one.

### **2.1.11 Challenges of MSE in Ethiopia**

In Ethiopia, small firms face more challenges in obtaining formal financing than large firms; they are much more likely to be rejected for loans, and are less likely to have external financing. Banks primarily cater to large firms and, although they perceive the SME segment as a promising one in terms of growth prospects, they also tend to see SME lending as having higher risks and lower profitability than lending to large enterprises (WBG, 2012).

MoUDH (2016), identified the following bottle necks to MSE in Ethiopia;

The limited capacity of MFIs' disbursement and of MSEs to repay loans has constrained expansion of outreach services efficiency and effectiveness. The supply of credit is well below that demanded by MSEs because the lending capacity of most of the MFIs was small. The mobilization of savings in most MFIs suffers from inadequate focus and limited capacity. Critical issues identified in MSEs were: a poor repayment culture, their inappropriate use of credit and lack of experience in using credit to improve competitiveness. In addition, the limited efforts exerted by ULGs to achieve better repayment rates further complicated the problem. Issues Related to Production, Marketing and Cluster Development, Challenges Related to the Industry Extension Service, Human Resource Development Issues, Technology Development and Transfer Related Challenges, market and Marketing Issues and One Stop Shop Service Problems.

## 2.2 Empirical Studies

USAID (2005), provides an overview of how opportunities and capabilities can interact to shape the trajectories of MSE growth. This typology presents four “ideal types” of MSE growth profiles—distinctions are more blurry in reality, so a particular MSE may not clearly fall into one category. Most prominently, MSEs that demonstrate high, sustained growth rates are frequently termed “gazelles.” These highly performing firms typically share two fundamental characteristics—they have profitable business opportunities and appropriate capabilities to harness these opportunities. Only a minority of firms become “gazelles,” which drive overall growth in the MSE sector. It also provides key factors affecting MSE growth as business environment, social, firm and individual.

As explanatory study of (USAID, *The role of Micro, Small and Medium Enterprises in Economic Growth: A Cross Country Regression Analysis*, 2008), concludes the existence of a causal connection between economic growth and the prevalence of firms of medium size or smaller (250 employees or less). However, it finds only limited correlative or causal connection between growth and the prevalence of small or micro firms with fewer than 10, 20, or 100 employees. Major factors as impediments to SME growth and development, amongst which high lending rate, government regulatory constraint, small domestic market size, collateral requirement for financing and lack of technically skilled workers are on the top (Manzur and Nayeem, 2009).

Working paper provided by the group of scholars, (Zott *et al*, 2010) suggests three basic consideration in business model i.e. business model archetype, business model as activity system and business model as cost/revenue architecture. These distinct ideas could be fruitfully investigated individually, as well as in relation to each other under the umbrella theme of the business model. Again it found that a few important themes, primarily around the notion of the business model as a new unit of analysis, offering a systematic perspective on how to do business, encompassing organizational activities and as a source of value creation.

Moreover, another finding revealed that micro financing enhance survival of MSEs but most of the enterprises remain at the survival level of the business life cycle (Babajide, *Microfinance And Micro & Small Enterprises (Mses) Survival In Nigeria -A Survival Analysis Approach*, 2011).

Fadahunsi, (2012) classified factors that influence small firm growth as entrepreneurial characteristics, firm characteristics, management practices and external environmental

factors. Babajide (2012) on the other hand find strong evidence that access to microfinance does not enhance growth of micro and small enterprises in Nigeria. However, other firm level characteristics such as business size and business location, are found to have positive effect on enterprise growth.

Shiferaw (2013) also concluded that the activities of the MSEs constrained by many factors like lack of financial capacity, lack of working and production places, rules and regulatory procedures, lack of capacity to compete larger enterprises, and insufficiency of business development. (Tefera *et al*, 2013) study shows that there is a significant gender difference on the growth of MSEs with male owner growing faster than those owned by female and the initial investment on the firm, the location and the sector in which the MSEs operates matter a lot for the growth of these enterprises. (Kwadwo *et al*, 2013) suggest recipients of microfinance products and services are better off in terms of enhancing the activities of their SMEs, improving outputs and ensuring prudent financial management than those without microfinance services.

The startup capital, location and sector in which MSEs operate matter a lot for their growth (Woldeyohanes, 2014). (Wangu *et al*, 2014) identified that the key challenges hindering micro and small enterprises from accessing credit facilities to be high cost of repayment, strict collateral requirements, unwillingness of people to act as guarantors, high credit facilities' processing fees and short repayment period.

From the study of (Goshu, 2015), the result of regression analysis shows that sources of finance for MSE operators, loan term (duration of loan period) that MSEs borrowed from MFI, previous business experience of the operators, marketing skill of members of the business, source of raw materials of the MSE, and major customers of the product or services of MSEs affects positively the growth of profitability of MSEs business significantly at 1% level of significance.

Alvemar (2015) Study revealed that there tends to be a negative correlation between farm size and productivity for the case farms, suggesting that farm growth decreases productivity. Moreover, management, administrative work and the employees of the firm have been identified as an important factors for firm growth, whereas, machinery and labor is not decisive for productivity. The study has found that the use of information technology and precision agriculture tools do not explain differences in either productivity or costs of management and administrative work.

Owners of MSEs with more years of work experience before starting their own business have relatively faster growth than those without experience (Amha, 2015).The results of the

regression analysis showed that age of enterprises, age of operators, education level, number of employees, amount of initial capital, entrepreneurial skill, experience of manager, access to training and access to market were statistically significant at less than 1% significance level and had positive relationship with the performance of enterprises ( Ababiya *et al*, 2015).

(Benzazoua *et al*, 2015) classified factors affecting the growth of small businesses as Business Environment Factors and internal factors; as this author business environment factors include Legal and regulatory, framework Access to external Financing, Human resources capacities and internal factors he considers are entrepreneur characteristics, Management capacities, Marketing skills and Technological capacities.

From the work of (Shenura *et al*, 2016) the qualitative data revealed that there is poor opportunity, relationship, strategy and commitment competencies among the leaders of MSEs. The logistic regression analysis reveals that many clusters of competencies were affected by factors like educational qualification, prior experiences, management and technical trainings, particularly, before the start of the business, sex, etc. Majority of the entrepreneurs also identified enterprise density, lack of access to appropriate technology, lack of access to finances, inappropriate location which is specially not controlled directly by themselves (since the place of work is selected and given to them by MSEDAs), inflation, unfavorable market condition and business environment and prior experiences as the major roadblocks inhibiting the flourish of their competencies.

The MSEs employment growth was significantly and negatively affected by limited access to finance, limited access to business services, and limited access to market. In addition, limited access to premises, limited access to finance and limited access to business services were significantly and negatively affect the operators' perception on growth potential of enterprises income (Molla, 2016).

### **2.3 Research Gap**

The MSEs' more of infant growth nature discussed besides those died at micro level and few amount developed to medium and large business. But more critically while reviewing different current works of scholars the researcher confronted of two conflicting ideas on the same thing; that is internal and external factors of growth of MSEs. Particularly the opposing result is related with the impact of owner's/manager's training, the impact of differences in initial capital, the type of sector enterprises engaged in, ownership type, the effect of external financial/credit source and the different services provided to the enterprise.

For instance, better growth resulted lower initial investment size, Manufacturing sectors (Woldeyohanes, 2014); owners attained training, started business with high initial investment, engaged on the service sector, and established in non-cooperative form (Seyoumet *et al*, 2016); enterprises which were engaged in construction was higher benefit cost ratio value ( Ababiya *et al*, 2015); that have no access to credit are rapidly growing (Haile *et al*, 2014).

The highest growth is observed in the manufacturing, no differences in the growth rate between who took training and those who did not receive training before starting their business besides those organized in the cooperatives or groups and get support from government experiences lower growth rates compared to the other form of ownership arrangements (Amha, 2015).

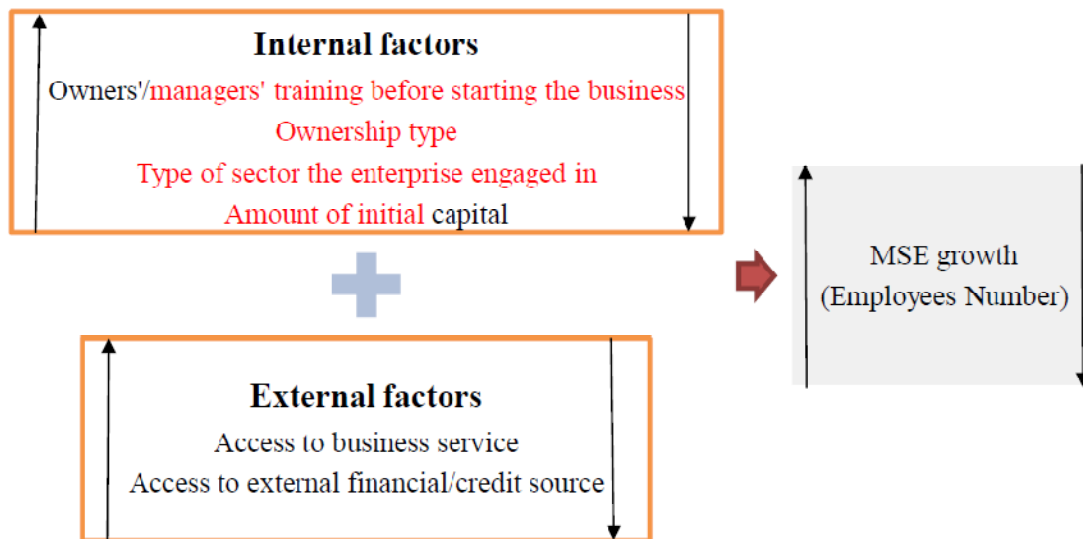
Another study revealed strong inverse relationship between the growth of enterprises and constraints such as Limited access to finance, limited access to business services and limited access to market (Molla, 2016). Moreover, key success factors tend to be personal qualities such as having an articulate vision or ambition and innate abilities, working experience in the formal sector as a factory employee or having worked in family businesses, managerial and entrepreneurial skills and higher equity in the invested money (Assefa *et al*, 2014).

Testing the importance of the saving constraints, (Abebe *et al*, 2016) conclude that while financial literacy training alone seemed ineffective, we find that reminders and joint treatment encouraged better saving behavior. The above all studies conducted in different parts of Ethiopia and the disagreement of their outcome calls for another research; thus the focus of this study was to analyze the impact of these factors on the growth of MSEs in Jimma town.

## **2.4. Conceptual Frame Work**

A conceptual framework is a product of qualitative process of theorization which interlinks concept that together provides a comprehensive understanding of a phenomenon or phenomena (Jabareen, 2009) as cited in (Gichuki *et al*, 2014). It articulates the pathways by which an intervention is expected to cause the desired outcome. The conceptual frame work of this study developed based on the theory and empirical evidences shown under theoretical part and empirical study part. The literature on firm growth dynamics and determinants adopt the approach that divides firm growth determinants into macro and micro dimension, which can be further divided into broad categories as business climate and firm-specific characteristics. For intransience, Fadahunsi (2012) classified factors that influence small firm

growth as entrepreneurial characteristics, firm characteristics, management practices and external environmental factors. Internal and external factors have a positive and significant effect to business performance of micro and small enterprises Munizu, Sumardi and Armayah (2016). Employment growth in MSEs shows positive significant relation with owners training, initial investment size, sector type and business ownership type at p-value less than 0.05 (Seyoum *et al*, 2016).



↕ = Indicates increase/decrease for measurable factors

Figure 1: Conceptual Frame work

**Source: Developed from literatures**

The internal factors and external factors summarized according to their causal relationship with enterprise growth. Further, from these the study then focused on local scholars to pick up the existing gap. Accordingly, after assessing many of them the ambiguous result found which related to the individual level characteristics (training before starting the MSE business), enterprise level characteristics (sector type, size of initial capital and ownership type) and external factors (access to external financial/credit source and access to business service).

# **CHAPTER THREE**

## **RESEARCH METHODS**

This chapter incorporates description of the study area, research design, target population, sampling technique, sample size determination, measurement variable, method of data analysis, model specification, validity, reliability, model fit test and ethical issues.

### **3.1 Description of the study area**

The study was conducted in 13 kebeles of Jimma town. Jimma town is located 357 Kms from Addis Ababa at South West of Ethiopia. The town is divided in to 17 Kebeles, 4 kebeles are the newly added to the town from the rural kebeles.

### **3.2 Research design**

Kumar (2011) classified the research design in quantitative type based on the three perspectives; the number of contacts, the reference period and the nature of the investigation. The first comprises cross-sectional studies, before-and-after studies and longitudinal studies. The second categorizes the studies as retrospective, prospective and retrospective–prospective. The third perspective classifies studies as experimental, non-experimental and semi experimental studies. Kothari (2004) classified as exploratory research design, descriptive and diagnostic research design and hypothesis-testing research design. Exploratory taken in this book for qualitative and while in quantitative explanatory type used.

When come to this study the type of the study is of explanatory research. It is an explanatory research that the objective is to analyze/determine the cause and effect relationship of growth and factors that influence growth of MSEs. Moreover, the study used cross-sectional data in the sense that all relevant data were collected at a single point in time. Descriptive statistics is applied to show mean, standard deviation and percentage in growth as well as to show general profile of MSEs in Jimma town besides the use of binary logistic regression.

### **3.3 Target population**

The study population is MSEs found in the Jimma town particularly those stayed in the industry five years and above, these are 308 MSEs. Oxford definition put growth as increase in size, number, value, strength, enlargement or expansion. The study aim is with the



change/increasing or decreasing possibility of employment number. So needs to lay starting point/year and ending point. To check regularity must take beyond two points. This is why we focused on enterprises started their work before five years (2013-2017).

### 3.4 Sampling technique

The sampling method employed was random sampling. Stratified simple random sampling technique is used here to stratify MSEs according to the 13 kebeles and proportionate stratified sampling within the kebele i.e. taking the number of MSEs proportional to the sample size. For this reason the sampling technique used in this study was randomly selecting from the total enterprise according to include all kebeles proportionally. In this case according to the 308 target population, 100 of them found in 4 kebeles (25 in each), 120 of them in 5 kebeles and 88 of them in four kebeles. So sample size proportional to each kebele was calculated in the following way;

$$\frac{\text{total sample size}}{\text{target population}} * \text{target population in one kebele}$$

Then  $\frac{113}{308} * 25 * 4$  (for the 4 kebeles 25 each) = 37

$$\frac{113}{308} * 24 * 5 = 44, \frac{113}{308} * 22 * 4 = 32$$

### 3.5 Sample size determination

The town is classified in to 17 administrative kebeles. But 4 kebeles are the newly added to the town. In this study they are excluded from the study population. To take the 13 kebeles in random manner the number of enterprises is not equal in all kebeles and some sectors may be excluded if the kebele taken as a sample lacks other sectors of enterprise or the characteristics needed in the study. As taken from the unpublished report of JMSEDO, 2014, in Jimma town, from 2005 to 2013, there were 1,126 formally registered MSEs which consist of a total of 6,626 individual members who are engaged in manufacturing, construction, service, urban agriculture and trade sectors. The data taken from Municipality shows around 420 total MSEs with in a resent five years and 308 those stayed five years and above in the industry. The figure 420 shows the total MSEs formally registered in all kebeles of Jimma town during

2012/13. From this 308 MSEs of the 13 urban kebeles are still in the work. Accordingly, the amount of respondents computed using the slovin's sample computation formula:

$$n = \frac{N}{(1 + Ne^2)}$$

Where n=sample size, N=population size, e=level of precision i.e. 0.075

So we have 308 total population of MSEs then  $n = \frac{308}{(1+(308)(0.075)^2)} = 113$

### 3.6 Measurement variable

I have put source for every variable along with operational definition (please, information beyond the content under this subtitle is needed it is better to refer under operational definition of variables). The dependent variable, firm growth, is measured in terms of changes in employment between time of establishment and survey period. This means the number of employees when starting the business and the current number of employees in the enterprise. To make clear more, I have gathered the number of employees each year starting from 2013 to 2017/18. Then taking the difference between the current number of employees and the initial number of employees. If the result is greater than zero it is assumed to there is growth in that enterprise, if the result become zero or less than zero there is no growth in that enterprise. The growth of MSEs is a function of a factors which includes individual-level characteristics (training before starting the business), firm characteristics (sector type, size of initial capital, ownership type) and external factors (external financial/credit source, access to business service).For measurement variables coding, in SPSS it is adjusted according to its suitability for analysis.

Table 3: Measurement variables

No.	Variables	Symbols used	Values attributed
1.	Employment growth	grE	1 if growth rate >0 0 if growth rate <=0
2.	Owners training before starting the business	OTIBstB	1=Yes 0=No
3.	Ownership type	OspT	1. Sole proprietorship 2. Partnership 3. Cooperative 4. other
4.	Sector type	SecTor	1=Manufacturing 2=Service

No.	Variables	Symbols used	Values attributed
			3=Trade 4=Construction 5. Urban agriculture
5.	Initial capital amount in ETB	AICpC	1=1-5000 2=5001-10000 3=10001-20000 4=20001-50000
6.	Access to external financial/credit source	ECrS	1=Yes 0=No
7.	Access to possible business services	PbS	1=Business advise 2=Short-term training 3=Special practical training

Note: many of the symbols and values are adjusted according to fit with the data from respondents and their suitability in the analysis.

Source: Developed by Researcher

### 3.7 Method of Data Analysis

Binary regression model (Logistic regression) is used in analyzing and examining the variables whether they are influencing the growth of MSEs. The data was also analyzed using descriptive analysis and inferring to the whole population using inferential statistics.

Logistic regression, unlike its linear counterpart, is unique in its ability to predict dichotomous variables, such as the presence or absence of a specific outcome, based on a specific set of independent or predictor variable. Like correlation, logistic regression provides information about the strength and direction of the association between the variables (Marczyk, DeMatteo and Festinger, 2005).

Following (Field, 2013), a categorical variable is one that names distinct entities. In its simplest form it names just two distinct types of things, for example male or female. This is known as a binary variable. To more describe binary variables are, being alive or dead, pregnant or not, and responding 'yes' or 'no' to a question. In all cases there are just two categories and an entity can be placed into only one of the two categories, in our case being growing or not.

### 3.8 Model specification

The feature of dependent variable (employment growth) calls for the use of binary logistic regression type that the study interested to test which variables predict weather the MSEs are growing or not. In the book of (Field, 2013), the appropriateness of binary logistic regression for such type of study described as, “When we are trying to predict membership of only two categorical outcomes the analysis is known as binary logistic regression, but when we want to predict membership of more than two categories we use multinomial (or polychotomous) logistic regression.”

When there are several predictors, a model is used in which the outcome is predicted from a combination of each predictor variable multiplied by its respective regression coefficient.

$$grE = bo + b1OTIBstB + b2AICpC + b3SecTor + b4PbS + b5ECrS + b6OspT + \epsilon \dots \dots \dots (1)$$

Where grE=enterprise growth

PbS=possible business service attained

OTIBstB=Owners or managers’ training before starting this business

ECrS=Access to external financial/credit source

AICpC=amount of initial capital

OspT=ownership type

SecTor=sector type

**bo = constant intercept, b1 – b6 = coefficients**

**$\epsilon$  = error term**

$$y = \begin{cases} 1 & \text{if } y^* > 0 \\ 0 & \text{if } y^* \leq 0 \end{cases}$$

Since growth is a categorical outcome (either grow or not grow) the above assumption may be violated. So to overcome such problem we have to transform the data using the logarithmic transformation. Andy Field confirmed this fact as ‘Logistic regression expresses the multiple linear regression equation in logarithmic terms (called the *logit*) and thus overcomes the problem of violating the assumption of linearity (Field, 2013).

$$P(grE) = \frac{1}{1 + e^{-(bo + b1OTBS + b2IC + b3ST + b4PBSA + b5AFS + b6OT)}} \dots \dots \dots (2)$$

Where P (grE) =probability of growth (the likelihood) of growth of enterprise

e=the base of natural logarithm

The simplified form of the above equation is;

$$P(grE) = \frac{e^{b_0+b_1OTBS+b_2IC+b_3ST+b_4PBSA+b_5AFS+b_6OT}}{1 + e^{b_0+b_1OTBS+b_2IC+b_3ST+b_4PBSA+b_5AFS+b_6OT}} \dots \dots \dots (3)$$

### 3.9 Validity and reliability issues

#### 3.9.1 Validity

Validity is the accuracy of a measure or the extent to which a score truthfully represents a concept; is whether an instrument actually measures what it sets out to measure (Field, 2013). Qualitative validity means that the researcher checks for the accuracy of the findings by employing certain procedures (Gibbs, 2007) cited in (Creswell, 2009). The same author defines quantitative validity as that in the research whether one can draw meaningful and use full inferences from scores on particular instruments.

Validity is concerned with congruence, or a ‘goodness of fit’ between the details of the research, the evidence, and the conclusions drawn by the researchers. These are either external validity (the ability to generalize from a study to a larger population) or internal validity (means that the study is drawing appropriate conclusions from the data at hand). In this study I used the deliberately developed questionnaire, sample all individuals initially included in the sample, informing the respondents the need of the information from them to minimize the respondents’ exaggeration or downward effect. The sample size also determined according to minimize the error arises from sample bias. I took greater commitment to cover the exact sample, coding the questionnaire with taking special care, rechecking every individual questionnaire if there is any non-response. The population is stratified according to the kebele set up and subsamples are randomly selected from each kebele. Then we know the respondents/MSEs differ only by chance and used statistics such as sample mean, sample standard deviation or sample variance to calculate how big those differences are and to check sampling distribution of mean, sampling distribution of standard deviation and frequency distribution.

My intention of the study was measuring MSEs growth. So the planned model to be used is more preferable to measure what is intended to be measured. Field (2013) explained about Binary Logistic Regression as follows; Binary Logistic regression is useful for situations in which we want to be able to predict the presence or absence of a characteristic or outcome based on values of a set of predictor variables. It is similar to a linear regression model but is suited to models where the dependent variable is dichotomous. Logistic regression coefficients can be used to estimate odds ratios for each of the independent variables in the

model. More importantly, I have shown the validity information by using ROC curve criteria as shown on figure 7. ROC curve is one of the identification of the model goodness of fit in logistic regression, i.e., to the exact prediction of the model. The model to be a good predictor the area under the curve must be greater than 0.8. In our AUC of fig.7 is 0.94 realizing the model acceptance. In summary the goodness-of-fit checked by pseudo  $R^2$ , Hosmer and Lemeshow  $\chi^2$  and others showed in detail under the title “goodness-of-fit test”.

### **3.9.2 Reliability**

Reliability shows the consistency throughout the sample. A reliable measure is one that keeps the error small. If a research tool is consistent and stable, hence predictable and accurate, it is said to be reliable. The greater the degree of consistency and stability in an instrument, the more is its reliability (Kumar, 2011).

As (Kothari, 2004) reliability can be seen from stability and equivalence aspect. The stability aspect is concerned with securing consistent results with repeated measurements of the same person and with the same instrument. The equivalence aspect considers how much error may get introduced by different investigators or different samples of the items being studied.

In this study questionnaire prepared according to minimize variation from enterprise to enterprise i.e. to measure growth in terms of employment size with the same questionnaire throughout the sample enterprises. The words are deliberately selected, short and precise to reduce the problem of boredom and fatigue as well as prepared in English and Afan Oromo. This would improve stability aspect. Similarly to improve equivalence aspect the researcher himself collected data willingly and in some few cases, two persons used to support in data collection, given them first orientation. Additionally sampling technique selected also the most preferable to ensure reliability. But in logistic regression the calculation of Cranach's is inappropriate since the independent variables are not fulfill the same length or equal scale measure and the dependent variable is also dichotomous.

### **3.10 Model fit test**

After building the model we need to determine whether it reasonably approximates the behavior of our data. As explained above the binary regression procedure reports the Hosmer-Lemeshow goodness-of-fit statistics. Residual Plots, Using variables specified various diagnostic plots are constructed (figure 1-6). The helpful plots are the change in deviance versus predicted probabilities and Cook's distances versus predicted probabilities.

Cox and Snell's  $R^2$  is based on the log likelihood for the model compared to the log likelihood for a baseline model. However, with categorical outcomes, it has a theoretical maximum

value of less than 1, even for a "perfect" model. Nagelkerke's  $R^2$  is an adjusted version of the Cox & Snell  $R$ -square that adjusts the scale of the statistic to cover the full range from 0 to 1. McFadden's  $R^2$  is another version, based on the log-likelihood kernels for the intercept-only model and the full estimated model. To compare competing models the model with the largest  $R^2$  statistic is "best" according to this measure. The classification table shows the practical results of using the logistic regression model. For each case, the predicted response is *yes* if that case's model-predicted probability is greater than the cut-off value specified in the model. The parameter estimates table summarizes the effect of each predictor. If the significance level of the Wald statistic is small (less than 0.05) then the parameter is useful to the model.

### **3.11 Ethical Issues**

Concerning social issues of any business Responsibility towards Customers, responsibility towards Employees, responsibility towards the Community will be identified along with our work. SEAANZ also described SMEs sustainability in terms of external (Government, customers and stakeholders) and internal (performance, employees and owners/managers) (SEAANZ, 2013). United States EPA recommended the three sustainability pillars are (Social, Environmental and Economic) and described the possibility of placing more or less emphasis on each of the three pillars (EPA, 2012). Having the workplace and the community as two points of focus in creating social cohesion and equity, the social dimension of proactive CSR actively recognizes "the health, safety and general well-being of employees; motivates the workforce by offering training and development opportunities; and enable firms to act as good citizens in the local community". Entrepreneurs need to exercise due diligence in conducting their businesses in a socially and ethically responsible manner internationally. Since, unethical business practices are not going to be helpful to the sustainability of business enterprises strategically. Ethical behavior of businesses has become a major issue throughout the world (Saeed, 2009). My study emphasis is not out of social concern. From the title of this study the word "sustainability" is incorporated for the purpose of social issue.

All the research participants included in this study were appropriately informed about the purpose of the research and their willingness and consent is secured before the commencement of distributing questionnaire and asking interview questions. To commence the research the necessary approval and permission was obtained from Jimma University,

Jimma Town MSEs& Urban development as well as conserved bodies of kebeles. Regarding the right to privacy of the respondents, the study was maintained the confidentiality of the identity of each participant. In all cases, names were kept confidential thus collective names 'respondent's sex' was used. No confusion and related problem with excellence of data, half of the questionnaires were translated from English to Afan Oromo then distribute to enterprises. Finally, the researcher will consult plentiful works of others and properly admitted them and will declare that this study will be his original work. Reliability address how accurate your research methods and teaching produced data. In formulation of appropriate questionnaires to answer the research questions in line with the research objectives, the incomplete and inaccurate primary data were omitted during data analysis in the study. In addition, the researcher was aware of some biases would occur on the side of the respondents and care has been taken to avoid them. And the researcher was collected the data by him self except few of them collected by persons getting aware of the issue prior gathering. Therefore, the validity and reliability of the data were indisputable.



## CHAPTER FOUR

### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

This part contains descriptive statistics, association between independent and dependent variables, logistic regression assumptions, goodness of fit test, identification of significant predictors and coefficients from the logistic regression output and interpretation of the logistic regression results in relation to the research questions.

#### 4.1. Descriptive statistics

##### 4.1.1. Demographic information

The respondents general profile summarized from the questionnaire and the descriptive statistics result put by the table 4. As shown in this table the item descriptive analysis shows that out of 109 MSE respondents, there were more female than male respondents. The results show that 68((62.4%) of total and (71.4% of growing)) of the respondents are female and the remaining 28 ((37.6%) of total and (28.6% of growing)) were male respondents/owners. It is similar with the report of MUDH (2016) which reported that a total of 1.5 million jobs were created and about half of the beneficiaries were female.

Majority of the female workers are engaged in cafeteria and restaurant, photo copy and beauty salon. The age category shows of the total 35.8% were aged between 26 to 35 years old, 25.7% were aged below 25, 27.5% between 36 and 45 and 11% were above 45 years old, which shows the respondents engagement into the MSE work mostly at their younger and adult age. Thus they could be in a better position to work hard and improving their business growth. When we see the educational level, most respondents were completed high school (30.3%) and percent (8.3%) were college/university completed. This shows that the participation of more literates is little in micro and small businesses. The issue needs the attention of every nation to the sector. The result is similar with the study of Munizu *et al* (2016), who conclude from the descriptive statistics saying the education level of respondents was dominant at high school level (60%), the rest was at the level of Bachelor /S1 (13.3%), SD and SMP each one (9.3%) and Diploma (8%). Information concerning the place where the respondents were before coming to the business shows majority of them replied as they were living at the current kebele/part of the town, others elsewhere in Jimma town and few respondents who engaged mostly in retail shop were come back to Ethiopia after staying 2-4 years in other country.

Table 4: Frequencies and Percentages Distribution of Respondents' Demographic Information

<b>Attributes</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>	<b>% of Total Sum</b>
<b>Sex of the entrepreneur</b>				
male	.2927	41	.46065	28.6%
female	.4412	68	.50022	71.4%
<b>Total</b>	<b>.3853</b>	<b>109</b>	<b>.48892</b>	<b>100.0%</b>
<b>Age of the Entrepreneur</b>				
below 25	.3571	28	.48795	23.8%
26-35	.4615	39	.50504	42.9%
36-45	.3000	30	.46609	21.4%
above 46	.4167	12	.51493	11.9%
<b>Total</b>	<b>.3853</b>	<b>109</b>	<b>.48892</b>	<b>100.0%</b>
<b>Level of education</b>				
no formal education	.3214	28	.47559	21.4%
primary school grade 1-4	.4848	14	.50752	14.3%
primary school grade 5-8	.3000	20	.47016	14.3%
secondary school	.4286	33	.51355	38.1%
university/college	.3333	9	.50000	7.1%
Others	.4000	5	.54772	4.8%
<b>Total</b>	<b>.3853</b>	<b>109</b>	<b>.48892</b>	<b>100.0%</b>
<b>place of owners living before starting the business</b>				
in this part of town (kebele)	.4706	34	.50664	38.1%
elsewhere in Jimma town	.3500	40	.48305	33.3%
out of Jimma town	.3333	24	.48154	19.0%
abroad of Ethiopia	.3636	11	.50452	9.5%
<b>Total</b>	<b>.3853</b>	<b>109</b>	<b>.48892</b>	<b>100.0%</b>

Source: Survey Result of 2018

#### **4.1.2. Descriptive Analysis of Growth Determinant Factors**

##### **Business ownership type**

We have collected data of the three types of business ownership (sole proprietorship, partnership and cooperative and carry out descriptive analysis before going regression. Accordingly the cooperative type shows better growth (74.3%) from total cooperative and 23.9% from the total ownership under investigation. In contrast sole proprietorship is the least growing among the three type in which only 13.9% from the total sole proprietorship and 4.6% (table 5) from the total ownership is growing in terms of the criteria used in this study i.e., employment growth as a measurement MSEs growth. This can be said that the enterprises in cooperatives are on the right truck according to the GTP II plan of Ethiopian government which considered strengthening cooperatives as especial case (FDRE, 2016).

But, the result is not consistent with the study of Amha (2015) who concluded that MSEs in the category of partnership and sole proprietorship had, by far, higher growth rate compared to the other form of ownership structures. As Scarborough (2012), describes, sole proprietorship form of business may encounter problems such as unlimited personal liability, limited access to capital, limited skills and abilities, feelings of isolation and lack of continuity of the business. For most sole proprietorships, banks are the primary source of borrowed funds. However, there are limits to how much banks will lend a sole proprietorship, most of which are relatively small (Fabozzi and Peterson, 2003).

Table 5: Employment growth among business ownership type

Business ownership type		employment growth		Total
		not growing	growing	
sole proprietorship	Count	31	5	36
	% within business ownership type	86.1%	13.9%	100.0%
	% of Total	28.4%	4.6%	33.0%
partnership	Count	27	11	38
	% within business ownership type	71.1%	28.9%	100.0%
	% of Total	24.8%	10.1%	34.9%
cooperative	Count	9	26	35
	% within business ownership type	25.7%	74.3%	100.0%
	% of Total	8.3%	23.9%	32.1%
Total	Count	67	42	109
	% within business ownership type	61.5%	38.5%	100.0%
	% of Total	61.5%	38.5%	100.0%

Source: Researcher survey from 13 kebeles of Jimma Town as of 2018

### Sector type

The sectors in which MSEs engaged was summarized under five categories; manufacturing, service, trade, urban agriculture and construction and undergo comparison for growth among them. Our descriptive statistics of the gathered data shows the service sector as the best growing sector with 78.3% within the service sector and 16.5% within the growing enterprise from the five sectors. Opposite to this urban agriculture and construction sectors are showing minimum growth (table 6). The result is in agreement with the study of Seyoum *et al* (2016), but not in agreement with that of Woldeyohanes (2014), who found manufacturing sectors MSEs grow faster than those in service/ trade sectors.

Table 6: Descriptive analysis of employment growth within a sector type

Sector type		employment growth		Total
		not growing	growing	
urban	Count	18	4	22
agriculture	% within sector included	81.8%	18.2%	100.0%
	% of Total	16.5%	3.7%	20.2%
construction	Count	17	4	21
	% within sector included	81.0%	19.0%	100.0%
	% of Total	15.6%	3.7%	19.3%
trade	Count	14	7	21
	% within sector included	66.7%	33.3%	100.0%
	% of Total	12.8%	6.4%	19.3%
manufacturing	Count	13	9	22
	% within sector included	59.1%	40.9%	100.0%
	% of Total	11.9%	8.3%	20.2%
service	Count	5	18	23
	% within sector included	21.7%	78.3%	100.0%
	% of Total	4.6%	16.5%	21.1%
Total	Count	67	42	109
	% within sector included	61.5%	38.5%	100.0%
	% of Total	61.5%	38.5%	100.0%

*Source: Researcher survey from 13 kebeles of Jimma Town as of 2018*

### **Prior training given and possible business service attained by the Enterprise**

As we described earlier on the demographic information, most of the employees engaged in the MSEs are high school complete which is not enough knowledge to run the business efficiently and otherwise to survive with the changing environment. So giving prior training as well as on job training is mandatory for these workers to fill their skill gap. Concerning these two issues data was gathered on prior training information and the type of service given after engagement to analyze the impact of both variables on employment growth. As can be seen from the table 7 the enterprises given prior training shows better growth than those not given prior training. Related to this, Kemunto (2012), analyzed the effect of business development services on the performance of MSE in Kisii Town. The performance of MSE had influenced by business development services training, advice, counsel, marketing, advertisement, technical assistance services and other non-financial services to these small business operators.

For start-up entrepreneurs basic operational business training in areas such as accounting, marketing, inventory control, costing, pricing and sales forecasting used to make them better-rounded business people and at least have a basic understanding of the business cycle (UNDP, 2004). The typical owner or managers of small businesses develop their own approach to management, through a process of trial and error.

Table 7 Descriptive analysis of Employment growth as affected by owners/managers training before starting the business and possible business service attained after engagement

Variables		employment growth		Total
		not growing	growing	
<b>possible business service attained if any</b>				
short term training	Count	31	9	40
	% within possible business service attained if any	77.5%	22.5%	100.0%
	% of Total	28.4%	8.3%	36.7%
business advice	Count	24	9	33
	% within possible business service attained if any	72.7%	27.3%	100.0%
	% of Total	22.0%	8.3%	30.3%
special practical training	Count	12	24	36
	% within possible business service attained if any	33.3%	66.7%	100.0%
	% of Total	11.0%	22.0%	33.0%
Total	Count	67	42	109
	% within possible business service attained if any	61.5%	38.5%	100.0%
	% of Total	61.5%	38.5%	100.0%
<b>owners training before starting the business</b>				
Training not given	Count	45	9	54
	% within owners training before starting the business	83.3%	16.7%	100.0%
	% of Total	41.3%	8.3%	49.5%
Training given	Count	22	33	55
	% within owners training before starting the business	40.0%	60.0%	100.0%
	% of Total	20.2%	30.3%	50.5%
Total	Count	67	42	109
	% within owners training before starting the business	61.5%	38.5%	100.0%
	% of Total	61.5%	38.5%	100.0%

Source: Researcher survey from 13 kebeles of Jimma Town as of 2018

As a result, their management style is likely to be more intuitive than analytical, more concerned with day-to-day operations than long-term issues, and more opportunistic than strategic in its concept. This style/approach of through trial and error resulted in inefficient utilization of scarce resource besides its influence on the overall enterprise growth. Likewise 60% from those got training and 30% of overall growing is shown by enterprises given prior training (table 7). Further, from the type of business service attained majority of the enterprise given business advice, but employment growth appeared within the enterprise given special practical training (table 7).

### **Amount of Initial Capital and Existence of credit source**

Financial part is the essential of all others for the growth and expansion of the business. It is identified that employment growth is highly affected in the absence of credit source. 30.3% from the total growing enterprise is recorded with in the enterprise possess credit source. Working capital is the engine for day to day operations. This could be allocated either from own start up if enough amount exist (collected from holding partners as equity type) or from having adequate credit source as either from government or private organization (in debt type). Few enterprises those possess these two things showed better employment growth (table 8). It is in line with Molla (2016) who said strong inverse relationship between the growth of enterprises and constraints such as Limited access to finance, limited access to business services and limited access to market. But, according to Kwadwo *et al* (2013), recipients of microfinance products and services are better off in terms of enhancing the activities of their SMEs, improving outputs and ensuring prudent financial management than those without microfinance services.

Their growth percentage shows direct relationship with the startup capital. The highest percentage (22.9%) out of the total growing enterprise is shown by the startup capital from Bir20001-50000. The result is similar to the study conducted by Seyoum *et al* ( 2016), who said 89.69% of the respondents agreed that their business would grow if they had invested higher than what they invested initially.

However, as the study of Woldeyohanes (2014), the average growth rate is higher for those MSEs that are started operation with an initial investment size that ranges from birr 5001-10,000 and decrease for those that start operation with an initial investment size that is over birr 10,000.

MSEs cite the lack of finance as the greatest constraint to their growth and development, whether they are formally registered or not. The financial needs of different types of micro

and small enterprises vary widely, with access problems particularly severe for start-up enterprises. In this regard, the formal financial institutions are reluctant to avail credit facility to the sectors. Their standards of operation, the long waiting time they take to sanction loans, unfavorable disposition towards small loans due to high administrative costs involved in financing them and the stiff and limited collateral requirements are some of the problems that are found to be discouraging micro and small enterprises from approaching them.

Concerning this issue Commission on Legal Empowerment of the Poor (CLEP, 2006) presented some of the MSE constraints as follow: financial constraints like lack of adequate investment capital, lack of sufficient loan, and inefficient financial market in terms of facilitating financial resources to entrepreneurs, excessive administrative costs and lack the experience in dealing with financial institutions and do not keeping track record of their business are the major obstacles in doing business, particularly in the MSE sector.

Table 8: Descriptive statistics of Employment growth as influenced by the Existence of Credit source and Amount of initial capital

<b>Variables</b>		<b>employment growth</b>		<b>Total</b>
		<b>not growing</b>	<b>growing</b>	
<b>Existence of credit source</b>				
No credit source exist	Count	47	9	56
	% within Existence of credit source	83.9%	16.1%	100.0%
	% of Total	43.1%	8.3%	51.4%
Have Credit source	Count	20	33	53
	% within Existence of credit source	37.7%	62.3%	100.0%
	% of Total	18.3%	30.3%	48.6%
Total	Count	67	42	109
	% within Existence of credit source	61.5%	38.5%	100.0%
	% of Total	61.5%	38.5%	100.0%
<b>Amount of initial capital category in ETB</b>				
1-5000	Count	22	2	24
	% within amount of initial capital category	91.7%	8.3%	100.0%
	% of Total	20.2%	1.8%	22.0%
5001-10000	Count	21	3	24
	% within amount of initial capital category	87.5%	12.5%	100.0%
	% of Total	19.3%	2.8%	22.0%
10001-20000	Count	19	12	31
	% within amount of initial capital	61.3%	38.7%	100.0%

Variables	employment growth		Total	
	not growing	growing		
20001-50000	category			
	% of Total	17.4%	11.0%	28.4%
	Count	5	25	30
	% within amount of initial capital	16.7%	83.3%	100.0%
Total	category			
	% of Total	4.6%	22.9%	27.5%
	Count	67	42	109
	% within amount of initial capital	61.5%	38.5%	100.0%
	category			
	% of Total	61.5%	38.5%	100.0%

*Source: Researcher survey from 13 kebeles of Jimma Town as of 2018*

#### **4.1.3. Mean score measurement of the Growth determinant factors**

Table 9 shows frequent application of mean scores and deviations of independent variables for employment growth in Jimma town. The lowest mean score appears to be 0.0833 and the highest 0.8333 with the average of 0.3853. From the type of business ownership sole proprietorship scores highest frequency with the mean score of 0.2895 and standard deviation of 0.45961. The highest mean score in this case attributed to the cooperative type with the score of 0.7429 and standard deviation of 0.44344. The mean variation among these scores shows the greater variation with in the amount of initial capital, variation amount (0.75) and smaller variation appears within the existence of credit source. Variation within this variable is 0.4333. This implies that employment growth with smaller initial capital and higher initial capital is highly different. The absence of employment growth with smaller initial capital is very similar throughout the sample. This may reliably indicated that the smaller initial capital has no potential to inspire enterprise growth. Likewise employment growth with in the manufacturing sector is relatively unsimilar from sample to sample when compared with others (table 8). This is because of the different sub-sectors under manufacturing may differ in operation. Amha (2015), put this difference as; the highest growth is observed in the metal and woodwork subsector, followed by textile and clothing, leather and leather products, and food and food products.



Table 9: Mean score of the Employment growth determinant factors

Variables	Mean	N	Std. Deviation
<b>business ownership type</b>			
sole proprietorship	.1389	36	.35074
partnership	.2895	38	.45961
cooperative	.7429	35	.44344
Total	.3853	109	.48892
<b>possible business service attained if any</b>			
short term training	.2250	40	.42290
business advice	.2727	33	.45227
special practical training	.6667	36	.47809
Total	.3853	109	.48892
<b>Sector type</b>			
urban agriculture	.1818	22	.39477
construction	.1905	21	.40237
trade	.3333	21	.48305
manufacturing	.4091	22	.50324
service	.7826	23	.42174
Total	.3853	109	.48892
<b>Existence of credit source</b>			
No credit source	.1607	56	.37059
Have credit source	.6226	53	.48936
Total	.3853	109	.48892
<b>owners training before starting the business</b>			
No prior training	.1667	54	.37618
Got prior training	.6000	55	.49441
Total	.3853	109	.48892
<b>amount of initial capital category in ETB</b>			
1-5000	.0833	24	.28233
5001-10000	.1250	24	.33783
10001-20000	.3871	31	.49514
20001-50000	.8333	30	.37905
Total	.3853	109	.48892

Source: Researcher survey of 2018

#### 4.2. Association between independent and dependent variables

Before the start of regression analysis it is important to check the correlation test between dependent variable and independent variables. The Pearson correlation scale ranges from -1 to +1, any value greater than zero indicates a positive direct relationship between the two variables, which implies that every increase in the independent variable will lead to the increase dependent variable, while any value less than zero indicates a negative indirect

relationship between two variables, that means that every increase in the independent variable will lead to the decrease on the dependent variable (Healey, 2010).

Correlation is an effect size and so we can verbally describe the strength of the correlation using the guide that (Evans 1996) suggests for the absolute value of r. So as observed on the above table 6 result, it can perceived that, amount of initial capital is the most correlated variable with employment growth (with the r value of 0.582) and it was followed by ownership type (with the r value of 0.5), existence of credit source (with the r value of 0.474), owners training before starting the business(with the r value of 0.445), sector type (with the r value of 0.42) and possible business service attained (r=0.374) respectively. Their correlation strength is between weak to moderate correlation.

Table 10: Pearson correlation matrix

	EG	OspT	PbS	AICp C	SecTo r	EcrS	OTIBst B
employment growth (EG)	1						
business ownership type (OspT)	.500**	1					
possible business service attained if any (PbS)	.374**	.190*	1				
amount of initial capitals (AICpC)	.582**	.371**	.150	1			
sector type (SecTor)	.420**	.255**	.162	.179	1		
Existence of credit source (EcrS)	.474**	.239*	.175	.301**	.238*	1	
owners training before starting the business (OTIBstB)	.445**	.353**	.330**	.233*	.224*	.266**	1

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

Source: From the research data surveyed as of 2018.

The result shows positive relationship between the dependent variable (employment growth) and all the independent variables. We could understand from this the positive contribution of the above listed independent variables to the employment growth, hence to the enterprise growth. The result is in accordance with the study of Heslina, Payangan, Taba and Pabo (2016) who found entrepreneurial characteristics and initial capital have significant influence on business performance.

The correlation (table 10) indicates that the employment growth is highly adhered to size of initial capital and their correlation being positive shows that as the size of initial capital increase the employment growth may increase. Their relationship is consistent with the result of descriptive analysis indicated on table 8 and 9 above. Similarly, employment growth may highly related with business ownership. As shown on table 10 above, the relationship between business ownership and employment growth is positive. This is because of the ownership type put in the order (sole proprietorship, partnership and cooperative) and moving from sole proprietorship to cooperative would contribute for increasing growth. In general, this result suggest that enterprises should focus their intention on having higher initial capital, being in cooperative type of ownership and service sector, choosing of operators who given prior trains and push the operators to attend special practical training while in the work as well as striving to have a credit source. On the other hand, possible business service attained while enterprises in the work has no significant association with amount of initial capital, type of sector and the existence of credit source. The implication is that its contribution to the employment growth is independent of these others variables.

### **4.3. Logistic Regression Assumptions**

Logistic regression does not make many of the key assumptions of linear regression and general linear models. It does not require linear relationship between the dependent and independent variables, the error terms (residuals) do not need to be normally distributed, the homoscedasticity is not required and the dependent variable is not measured on an interval or ratio scale. Additionally binary logistic regression requires there to little or no multicollinearity among the independent variables or the independent variables should not be too highly correlated with each other. These and other assumptions described below and several diagnostic graphs employed to confirm the assumptions.

#### **Linearity test**

Although there are no assumptions about the linear relationship among predictors, logistic regression assumes a linear relationship between the continuous predictors and the logit transform of the dependent variables known as log odds. The assumption is tested by adding new variables (interactions between each continuous predictor and its natural logarithms), against the dependent variable (Field, 2013).

Table 11: Logistic Regression Linearity Test Using the Interaction of IDV with its Natural Logarithm

	<b>B</b>	<b>S.E.</b>	<b>Wald</b>	<b>df</b>	<b>Sig.</b>	<b>Exp(B)</b>
OspT	.969	.476	4.136	1	.042	2.635
PbS	1.013	.449	5.100	1	.024	2.754
AICpC	-1.930	3.184	.368	1	.544	.145
secTor	.557	.264	4.431	1	.035	1.745
ECrS	2.137	.755	8.014	1	.005	8.478
OTIBstB	1.065	.754	1.997	1	.158	2.901
<b>AICpC by AICpC_LN</b>	<b>1.780</b>	<b>1.697</b>	<b>1.100</b>	<b>1</b>	<b>.294</b>	<b>5.930</b>
Constant	-8.007	4.392	3.324	1	.068	.000

Variable(s) entered on step 1: OspT, PbS, AICpC, secTor, ECrS, OTIBstB, AICpC \* AICpC\_LN

Source: survey result, 2018

If their interaction is statistically insignificant the assumption is not violated. As observed from the table 11, the interaction between the amount of initial capital and its natural logarithm is insignificant. Hence, the model met the assumption of linearity in logistic regression.

Significance values of amount of initial capital and its logarithmic transformed showed 0.294, which is greater than 0.05. Here we used only initial capital amount and its logit transform interacted because, the only continuous predictor from the variables used in this study is initial capital amount. This implies that the log odds of employment growth have a linear relationship with initial capital amount. The use of results indicated in table 11 is only for the purpose of showing linear relationship between the continuous predictors and the logit transform of the dependent variables known as log odds in logistic regression; so no need to interpret the other confidents from this table.

### **Classification plot**

Logistic regression does not make assumptions concerning distribution of scores for predictor variables. As taken from Field, 2013, logistic regression assumes probability of the events occurrence and non-occurrence and arranges at right hand and left hand side on the histogram. If the model perfectly fits the data, then this histogram should show all of the cases for which the event has occurred on the right-hand side, and all the cases for which the event hasn't occurred on the left-hand side. Accordingly our model puts the growing cases on the right and the non-growing on the left (figure 2). However small amount of growing cases appeared on the left side few amount of not growing cases found on the right side.

Observed Groups and Predicted Probabilities

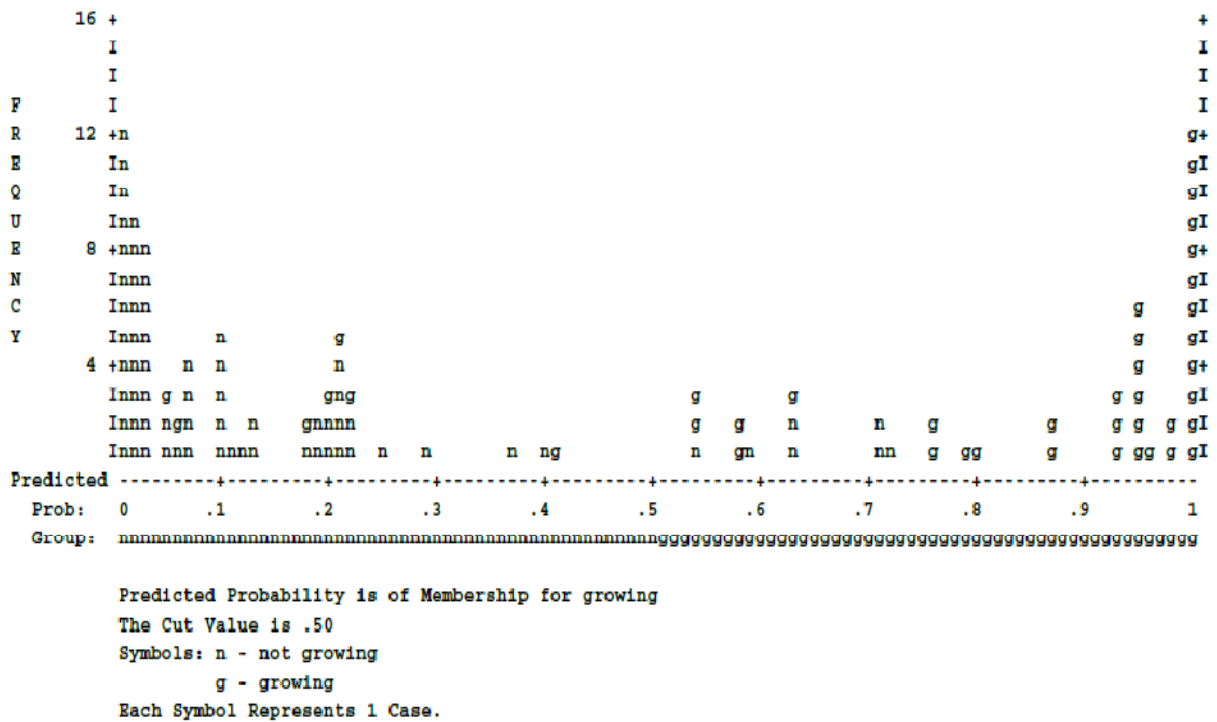


Figure 2 Histogram shows of the probability of events occurrence

As a rule of thumb, the more the cases cluster at each end of the graph, the better; such a plot would show that when the outcome did actually occur (i.e., the enterprise was grown) the predicted probability of the event occurring is also high (i.e., close to 1). Likewise, at the other end of the plot it would show that when the event didn't occur (i.e., the still no employment growth) the predicted probability of the event occurring is also low (i.e., close to 0). This situation represents a model that correctly predicts the observed outcome data. If, however, there are a lot of points clustered in the centre of the plot then it shows that for many cases the model is predicting a probability of 0.5; in other words, there is little more than a 50:50 chance that these cases are predicted correctly by the model. In general with this assumption the model experiences no problem.

**Multicollinearity Test**

Logistic regression is sensitive to high correlations among the predictor variables. This is referred to as Multicollinearity. If an independent variable is an exact linear combination of the other independent variables, then we can infer that the model suffers from perfect co-linearity. According to Gujarati (2003), Multicollinearity test helps to identify the correlation between explanatory variables and to avoid double effect of independent variable from the model. When independent variables are Multicollinearity, there is overlap or sharing of

predictive power. This may lead to the paradoxical effect, whereby the regression model fits the data well, but none of the explanatory variables (individually) has a significant impact in predicting the dependent variable. For this purpose, variance inflation factor (VIF) and tolerance test were computed to check whether or not Multicollinearity problem exists in explanatory variables. Multicollinearity is independent of regression types; so VIF used in linear regression is the same for logit. If the value of VIF is less than 10, there is no Multicollinearity between the explanatory variables and on the other hand VIF greater or equal to 10 is an indicator of a serious Multicollinearity problem. In addition, Tolerance is an indicator of how much of the variability of the specified independent is not explained by the other independent variables in the model and is calculated using the formula for each variable. If this value is very small (less than .10), it indicates that the multiple correlation with other variables is high, suggesting the possibility of Multicollinearity (Keith, 2006; Shieh, 2010).

As described on (Allen and Unwin, 2005), there is no formal way in the logistic regression procedure of SPSS to test for Multicollinearity and recommended to use the same with multicollinearity test in linear regression. So as this material it needs to ignore the rest of the output and focusing on the Coefficients table and the columns labeled Co linearity Statistics. As exposed in co linearity Statistics (table 12), the value of VIF of all independent variables was found to be smaller than 10 and similar purpose tolerance is used for test Multicollinearity by having less than 0.1. In this study the tolerance value for each independent variable is well above 0.1. Therefore, all the results confirm that Multicollinearity assumption is maintains.

**Table 12 Co linearity Statistics**

<b>Model</b>	<b>Tolerance</b>	<b>VIF</b>
business ownership type	.787	1.271
possible business service attained if any	.869	1.151
amount of initial capital category	.795	1.258
sector type	.874	1.144
Existence of credit source	.845	1.184
owners training before starting the business	.765	1.307

*Source: survey result, 2018*

Additionally Logistic regression is a very sensitive to extreme high correlation among IVs. The standard errors for the “B” coefficients were examined, to test for Multicollinearity. Because when severe Multicollinearity occurs, the standard errors for the coefficients tend to be very large (inflated), and the estimated logistic regression coefficients can be highly

unreliable. But in this study as shown from the table 13, it can be found out that, there was no evidence of Multicollinearity because none of the independent variables had a standard error larger than 2.0.

### **Outliers and Influential Cases**

By excluding the outliers from the analysis substantially, an accuracy of the model is improved. A poor fit of the model occurs also when the category of outcome shows a high probability of being in another category. An outlier is checked by examining residuals. Residuals for each case are computed and then standardized, to assist in the evaluation of the fit of the model to each case. Influential cases are identified through Cook's distances test as recommended by (Tabachnick and Fidell, 2007).

It is important to check for the presence of outliers, or cases that are not well explained by our model. In logistic regression terms, a case may be strongly predicted by our model to be one category but in reality be classified in the other category. These outlying cases can be identified by inspecting the residuals, a particularly important if we have problems with the goodness of fit of model (Allen and Unwin, 2005). We can understand this truth by plotting the logit residual, deviance and leverage values against the predicted probability. Standardized residual against predicted probability also gives the same information with the above. The graph informed us which case number seems to be not influential if removed from the model. We can see on the following figure 3, the observations that are the far away from the others.

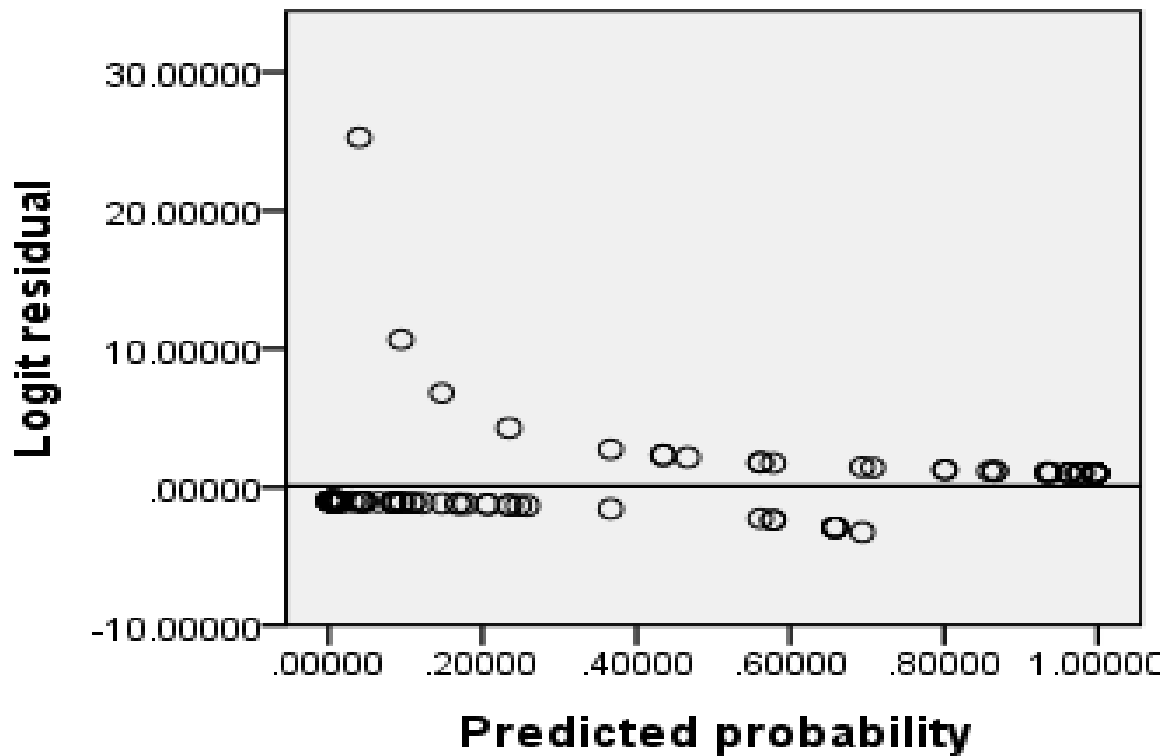


Figure 3 Residual graph shows of Outliers and influential cases in Logistic Regression

Case whose deletion results in substantial changes to the regression coefficients are said to be influential. Cook's distance measures approximate aggregate change in estimated regression parameters resulting from deletion of a case. Cohen et al. (2003) and others Norusis (2006) as well as Field (2013) note that values of 1.0 or more indicate a problematic degree of influence for an individual case. Figure 4 Cook's Distance shows of influential cases shows the index plot with Cook's D on the vertical axis and case numbers on the horizontal axis; no cases have values of 1.0 or greater.



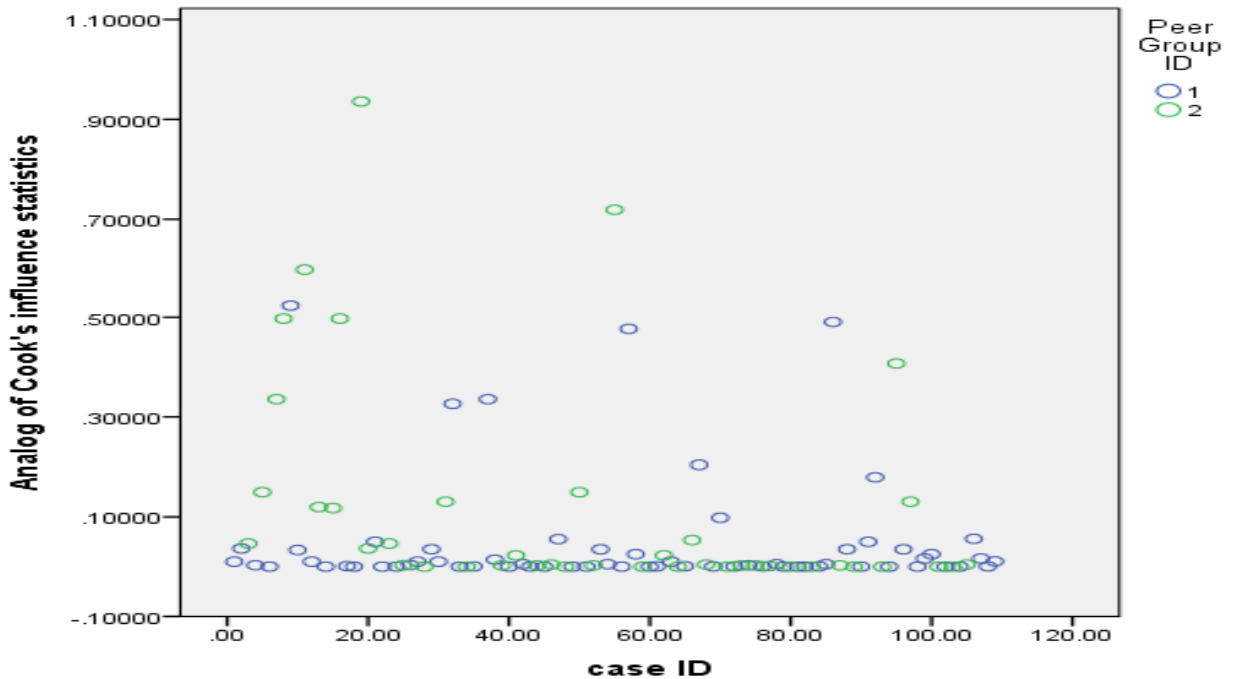


Figure 4 Cook's Distance shows of influential cases

### Leverage

In linear regression, leverage measures how unusual a case is in terms of the values of the IVs in the regression model. Cohen *et al.*, 2003, as specified on the (Orme and Orme, 2009), no clear benchmarks for leverage values with binary logistic regression. However, index plots can be used to identify cases with substantially different leverage values than those of other cases.

Beyond this idea, more preferably the average leverage can be calculated like (the number of predictors plus 1, divided by the sample size) and then leverage test identifying for values greater than twice or three times this average value. Cases with greater leverage can exert a disproportionately large influence on regression results.

As showed on the index plot of the indexed cases of this study (by indexing all cases of independent variables), there may be a few cases that are somewhat different from the others (Figure 5 Scatter plot shows of Leverage Values). It shows only 3 cases with the value greater than 0.19. On the other hand average leverage of the model is  $((6+1)/109)*3=0.192$ . So the model used is in accordance with this assumption.

However, cases with large leverage values will not necessarily have a large influence on the regression coefficients because they are measured on the outcome variables rather than the predictors (Field, 2013).

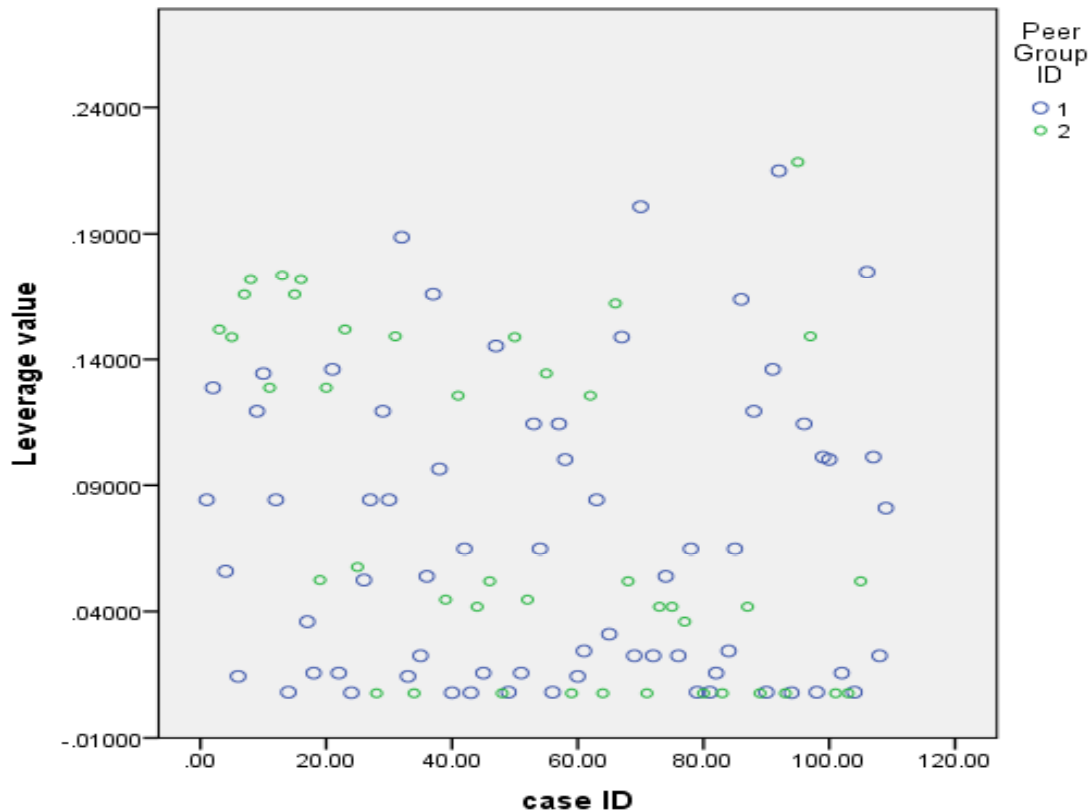


Figure 5 Scatter plot shows of Leverage Values

## Residuals

A residual is a measure of the difference between the actual and the estimated values of the DV for a case. A large absolute value of a residual indicates a case for which the model fits poorly, and possibly a case that exerts a disproportionately large influence on the estimated regression results. Even though agreement does not exist on the single best type of residual to examine there seems to be some agreement that standardized or unstandardized deviance residuals are useful, and SPSS will compute these residuals for each case. Logistic regression does not require residuals to follow a normal distribution and testing for normality is not like that of linear regression. Logit does not make assumptions concerning distribution of scores for predictor variables.

Unlike linear regression, standardized and unstandardized residuals will not be distributed normally, and there are no fixed rules for defining what counts as a large residual. For standardized and unstandardized deviance residuals, values less than  $-2$  or greater than  $+2$  also warrant some concern and values less than  $-3$  or greater than  $+3$  merit close inspection. As we observe from the Figure 6: Scatter plot of Deviance values, two cases are greater than the value of  $+2$  and no case is less than  $-2$ . So the assumption is not violated.

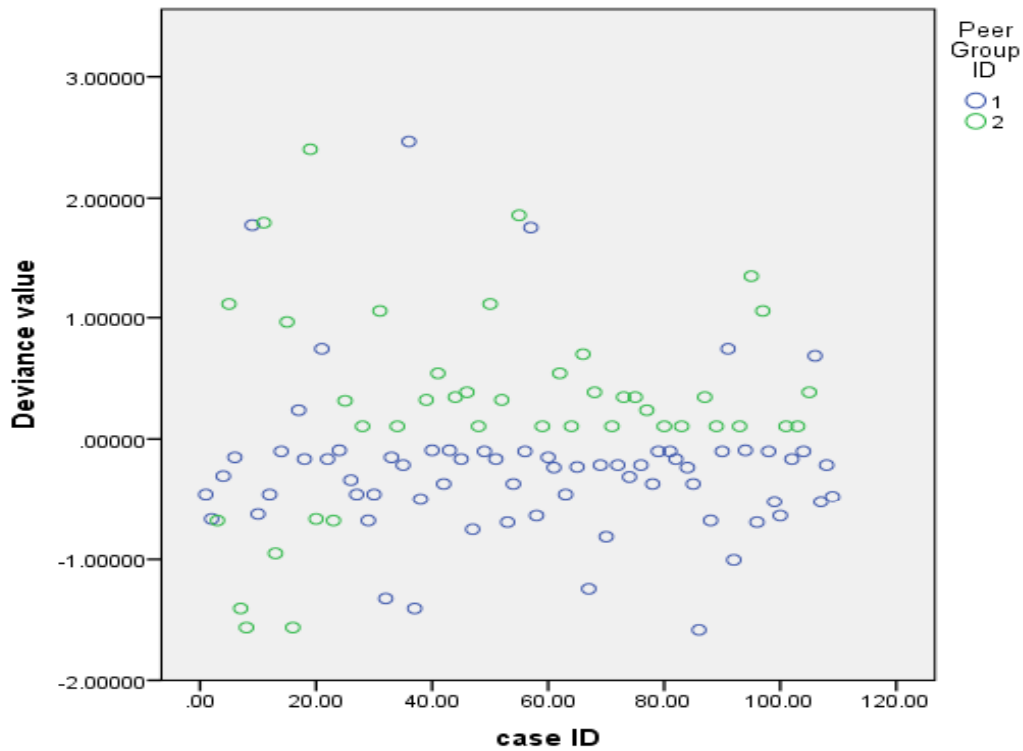


Figure 6: Scatter plot of Deviance values

Similarly as Field, 2013, for standardized residuals no more than 5% of cases have absolute values above 2, and no more than about 1% have absolute values above 2.5. Any case with a value above about 3 could be an outlier. I have showed this information on the Figure 7 Scatter plot of standardized residual below. As indicated, only two cases appeared above the score 2 of standard residual and no case found above 2.5. So the model supports the assumption.

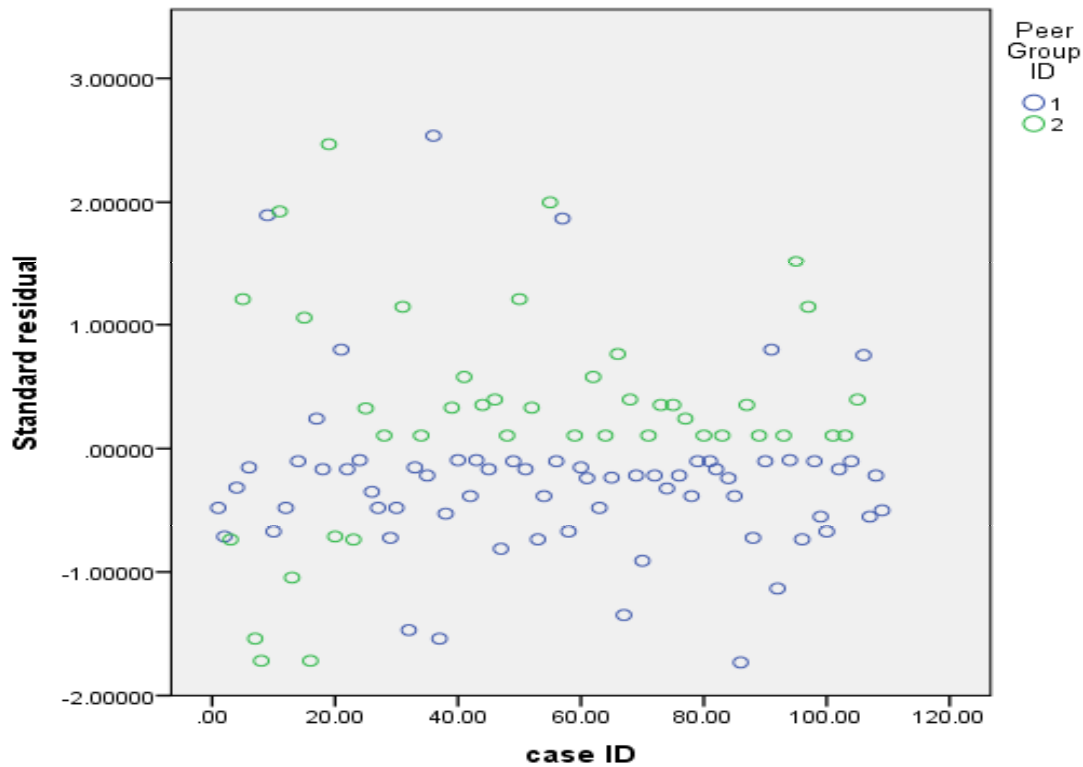


Figure 7 Scatter plot of standardized residual

### Sample size test

With a small sample, one can obtain a result that does not generalize other target population. If results do not generalize to other samples, then it is little scientific value. To test sample size researcher uses a formula given by (Pallant, 2005, p. 142). This formula used to test sample size problem by taking into account the number of independent variables as follow:

$$N > 50 + 8m = N > 50 + 8(6) = 109 > 98$$

Where; m = number of independent variables which is 6 independent variables for this study

Based on the above equation result, valid sample size 109 is greater than 98 and this result showed that the data conforms to the sample size assumption.

Specifically for logistic regression, it is recommended to be concerned about the number of events in the smaller of the two categories of DV, in addition to total sample size. Some sources advise at least 10 events for each IV (Peduzzi, Concato, Kemper, Holford, & Feinstein, 1996) as stated in the (Orme and Orme, 2009). For conformation with this criteria the total cases used here is 109 which is greater than  $10 * 6 = 60$ .

## 4.4. Goodness of fit test

### Omnibus Tests of Model Coefficients

Logistic regression gives us an indication of the adequacy of model (set of predictor variables) by assessing 'goodness of fit'. The Omnibus Tests of Model Coefficients gives us

an overall indication of how well the model performs, over and above the results obtained with before none of the predictors entered into the model. Field, (2013) states for this set of results we want a highly significant value (the Sig. value should be less than .05). Concerning the model used in this study the value of Omnibus Tests of Model Coefficients shown in the table 13, is .000 (which really means  $p < .0005$ ). Therefore, the model (with our set of variables used as predictors) is better than SPSS's original guess with the absence of predictors, which assumed that everyone would report as no employment growth. The chi-square value, of this model is 90.919.

**Table 13 Omnibus Tests of Model Coefficients**

	<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
Step	90.919	13	.000
Block	90.919	13	.000
Model	90.919	13	.000

Source: Survey result of 2018

#### **Hosmer and Lemeshow Test**

The results shown in the table 14, also supports our model as being worthwhile (Orme and Orme, 2009). This test, which SPSS states is the most reliable test of model fit available in SPSS, is interpreted very differently from the omnibus test discussed above. For the Hosmer-Lemeshow Goodness of Fit Test poor fit is indicated by a significance value less than .05, so to support our model we actually want a value greater than .05. My model showed no problem of goodness of fit with these criteria the chi-square value for this test is 3.692 with a significance level of 0.884. This value is larger than .05, therefore indicating support for the model.

**Table 14 Hosmer and Lemeshow Test**

	<b>Chi-square</b>	<b>df</b>	<b>Sig.</b>
	3.692	8	.884

Source: survey result of 2018

#### **Cox & Snell R Square and the Nagelkerke R Square**

The Cox & Snell R Square and the Nagelkerke R Square values provide an indication of the amount of variation in the dependent variable explained by the model (from a minimum value of 0 to a maximum of approximately 1)(Orme and Orme, 2009). These are described as pseudo R square statistics, rather than the true R square values that that used in the multiple linear regressions. The result of regression output gives the two values are 0.566 and 0.768, suggesting that between 56.6 percent and 76.8 percent of the variability is explained by this

set of variables (table 15). This means there is 56.6% (according to Cox & Snell R Square) and 76.8% (according to Nagelkerke R Square) variation on employment growth.

Table 15 Model Summary

-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
54.402 <sup>a</sup>	.566	.768

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source: survey result of 2018

Similarly the model correctly classified 87.2 percent of cases overall (sometimes referred to as the percentage accuracy in classification: PAC) table 16, an improvement over the 61.5 percent in model with no predictors. The results displayed in the same table can also be used to calculate the additional statistics i.e., sensitivity and specificity. The sensitivity of the model is the percentage of the group that has the characteristic of interest employment growth (growing) that has been accurately identified by the model (the true positives).

In this case the model was able to correctly classify 83.3 percent of the cases which are not growing responses. The specificity of the model is the percentage of the group without the characteristic of interest (not growing) in our case that is correctly identified (true negatives) which the model employed 89.6 percent not growing enterprise correctly predicted. The positive predictive value is the percentage of cases that the model classifies as having the characteristic that is actually observed in this group. The negative predictive value is the percentage of cases predicted by the model not to have the characteristic that is actually observed not to have the characteristic. Both characteristics were shown by the diagnostic graph (Figure 8 ROC shows of True positive and True Negative in addition to the table 16, below.

Table 16 Classification Table

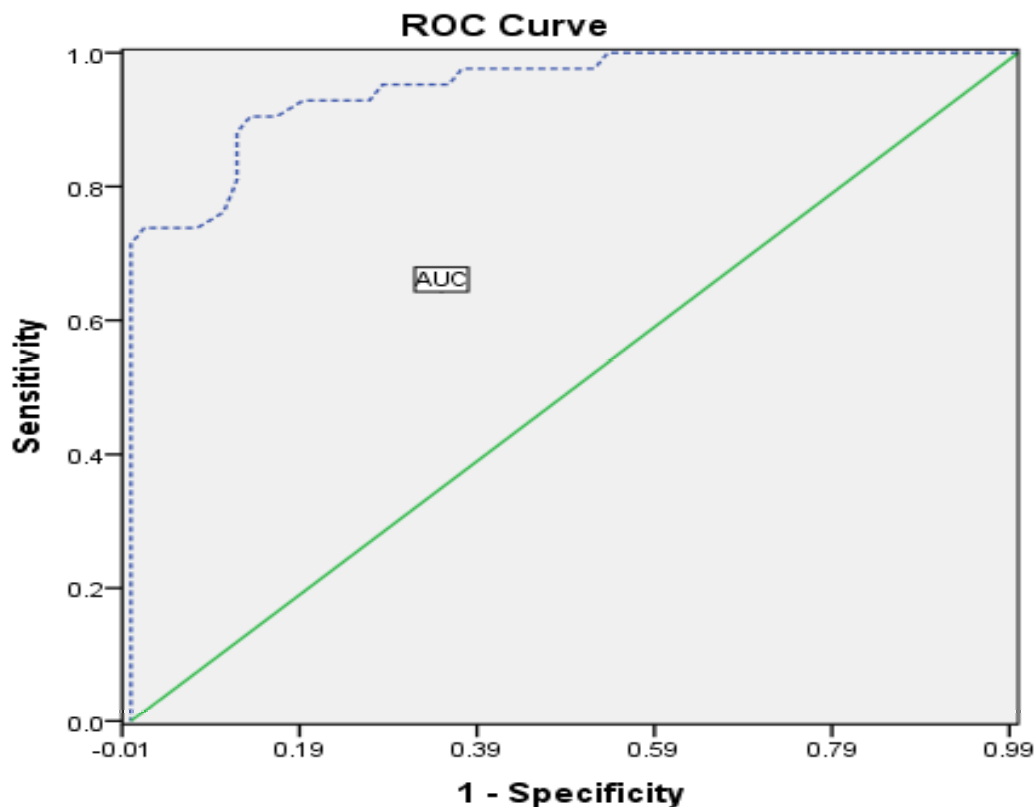
Observed		Predicted			Percentage Correct
		employment growth not growing	employment growth growing		
employment growth	not growing	60	7	89.6	
	growing	7	35	83.3	
Overall Percentage				87.2	

The cut value is .500

Source: survey result of 2018

## The ROC curve

ROC curve summarizes the model's performance by evaluating the tradeoffs between the true positive rate (sensitivity) and false positive rate (specificity) (Kumar and Indrayan, 2011). For plotting ROC it is advisable to assume probability ( $p > 0.5$ ) since we are more concerned about success rate. ROC summarizes the predictive power for all possible values of  $p > 0.5$ . The area under curve referred to as index of accuracy or concordance index, is a perfect performance metric for ROC curve.



Diagonal segments are produced by ties.

Figure 8 ROC shows of True positive and True Negative

Higher the area under curve, better the prediction power of the model. As a rule of thumb AUC greater than 0.8 shows better model. Area under the curve of the fig8 is 0.94 states the better prediction of the model. The ROC of perfect predictive model has true positive equals 1 and false positive equals 0. The curve is sketched by using predicted probability as test variable and employment growth as state variable. It shows exactly the model fit conforming the ROC curve criteria. It looks like the above figure.

## 4.5. Identification of Significant Predictors and Coefficients from the Logistic Regression Output

Here the intention is to identify the variables that contribute significantly to the predictive ability of the model by using the Wald test, looking the significance value less than 0.05. The

model identified three significant variables (the business ownership type, amount of initial capital and existence of credit source) as determinant factors of MSEs growth (table 17). Existence of credit source and owners' training before starting the business have odds ratio greater than 1, stating that a unit change in the logit coefficient increases the logit (employment growth) by the value of the logit coefficient. On the other hand, Ownership type, possible business service attained, amount of initial capital and sector type have the odds ratio less than 1, which implies a unit change in logit coefficient reduces the employment growth by the value of the logit coefficient. As observed from the table 17, the variable measuring the existence of credit source showed the beta value of 2.494 (significance value .006). This indicates that the more existence of the credit source for MSEs the more likely is the enterprise growth. The B value of the variable owners training before starting the business is 0.876 (significance value 0.287). This could assume that the contribution of owners training before starting the business for the employment growth. But this variable is not significantly contributed for the model. For the others variables I used the dummy variables (sector type dummy, ownership type dummy, dummy for initial amount of capital and for the possible business service attained by the enterprise). For the two variables (ownership type and amount of initial capital) all the dummies are contributed significantly. For the amount of initial capital making (Bir20001-50000) as reference, the B value of the enterprise with smaller initial capital (Bir1-5000) is (-4.658, significance value .001). The negative value of the coefficient suggests that smaller amount of initial capital is associated with less probability of growth since we used the higher capital amount as reference. This indicates that the smaller the amount of initial capital leads to the enterprise less likely to grow comparing with the reference amount. The ownership type dummy shows (B=-2.89, significance value 0.014) d1 and (B=-2.42, significance value 0.019) d2 making cooperative as the reference one. This value indicates that being ownership type other than cooperative resulted in less contribution to the employment growth (table 17).

The odds ratio of the existence of credit source (12.115) may inform us, the MSEs those have credit source is 12.115 times more likely to grow than those lack credit source. From the dummy variables of ownership type, the first dummy shows the odds of 0.056. From this it may be concluded that being d1 (sole proprietorship) is only 0.056 times less likely to grow than the reference (cooperative type). Similarly the 3<sup>rd</sup> dummy of initial capital amount gives the odds ratio of 0.125. It is the indicator that the amount of initial capital at this category is 0.125 times less likely to grow than the reference one.



Table 17 Results of Binary Logistic Regression Analysis

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
OspT			6.907	2	.032			
OspT(1)	-2.890	1.178	6.017	1	.014	.056	.006	.559
OspT(2)	-2.420	1.034	5.472	1	.019	.089	.012	.675
PbS			3.673	2	.159			
PbS(1)	-1.752	.916	3.659	1	.056	.173	.029	1.044
PbS(2)	-.433	.982	.194	1	.659	.649	.095	4.449
AICpC			13.430	3	.004			
AICpC(1)	-4.658	1.389	11.251	1	.001	.009	.001	.144
AICpC(2)	-2.869	1.140	6.328	1	.012	.057	.006	.531
AICpC(3)	-2.082	.978	4.533	1	.033	.125	.018	.848
secTor			4.177	4	.383			
secTor(1)	-2.555	1.282	3.972	1	.046	.078	.006	.958
secTor(2)	-.941	1.334	.498	1	.480	.390	.029	5.328
secTor(3)	-.829	1.306	.402	1	.526	.437	.034	5.650
secTor(4)	-1.064	1.266	.706	1	.401	.345	.029	4.128
ECrS	2.494	.900	7.687	1	.006	12.115	2.077	70.661
OTIBstB	.876	.823	1.132	1	.287	2.401	.478	12.057
Constant	3.276	1.779	3.389	1	.066	26.457		

Source: Survey Result of 2018

We use the logistic regression equation to predict the probability of growth as follows,

$$P(\text{grE}) = \frac{1}{1 + e^{-(b_0 + b_1 \text{OTIBstB} + b_2 \text{AIC} + b_3 \text{SecTor} + b_4 \text{PbS} + b_5 \text{ECrS} + b_6 \text{OspT})}}$$

For its suitability let me write the coefficients and their respective variable separately from the base of natural logarithm (e) then to merge them. The coefficients are:-

$$3.276 - 2.890 \text{ospT}(1) - 2.420 \text{ospT}(2) - 1.752 \text{PbS}(1) - 0.433 \text{PbS}(2) - 4.658 \text{AIC}(1) \\ - 2.869 \text{AIC}(2) - 2.082 \text{AIC}(3) - 2.555 \text{SecTor}(1) - 0.941 \text{SecTor}(2) \\ - 0.829 \text{SecTor}(3) - 1.064 \text{SecTor}(4) + 2.494 \text{ECrS} + 0.876 \text{OTIBstB} \dots \dots \dots 1$$

Let the eq. 1 rewrite as  $\beta_0 + \beta_n X_n$

So our predicting eq. will be:- 
$$P(\text{grE}) = \frac{1}{1 + e^{-(\beta_0 + \beta_n X_n)}}$$

#### 4.6. Interpreting the Logistic Regression Results in relation to the research questions

*Is there growth difference between MSEs those their owners/managers given prior training and those not given?*

The study result employed that prior training given to the owners/managers of MSEs does not contribute significant effect on the growth of MSEs. The odds ratio of this variable is 2.401. This is to show that the MSEs whose owners'/managers' given training before starting the business is 2.401 times more likely to grow than those whose owners'/managers' did not get training before starting the business. The result is in line with the study conducted by Amha, 2015, who found no differences in the growth rate between who took training and those who did not receive training before starting their business

*How does the size difference of their initial capital impact the growth in small business?*

As shown in the table 17 above the initial investment amount has a positive impact on the growth of micro and small enterprises in Jimma town. The result of logistic regression shows the initial capital amount significantly contributes to the MSEs growth. The odds ratio of the capital size (Birr1-5000) is 0.009, making the capital amount (Birr20001-50000) the reference amount. This implies that enterprises those start their business with smaller amount (Birr1-5000) is 0.009 times less likely to grow than the reference amount. Similarly the MSEs started their business with the amount of (Birr5001-10000) is 0.057 times less likely to grow than the higher (reference) amount. In general the higher the amount of the initial capital, the more is the growth of MSEs making other variables constant. This result is consistent with that of (Woldeyohanes, 2013), (Tefera *et al*, 2013) and (Seyoum *et al*, 2016). Sufficient amount of initial capital capacitates enterprises to operate with full potential to run their business and hence facilitates good performing environment for the enterprises to survive and continue in the business.

*How does the sector type difference impact MSEs growth?*

The sector type evaluation in this study shows insignificant effect on employment growth at ( $p < 0.05$ ) confidence interval. The reference sector used here is service sector. However, from the sector dummy, d1 (urban agriculture) appears significant. In spite of the significance of this variable, the odds ratio of the manufacturing dummy is 0.345. This means engaging in manufacturing sector is 0.345 times less likely to grow than engaging in service sector. But we can't interpret the impact of this variable confidentially because of its insignificance. It is better to say being engaging work in different sector has no significance change on employment growth. The result contradicts with (Ababiya *et al*, 2015) and (Amha, 2015).

*Is there any business service for the MSEs and does the absence of this influence growth?*

The type of business service attained by the enterprises is given dummy variables taking special practical training as a reference. All the dummy variables of this variable are not significant in this study. The regression computed the odds ratio of the first dummy (short term training) to be 0.173, which implies from the different business services given while MSEs in the work getting short term training is 0.173 times less likely to grow than those given special practical training. However, according to (Anane *et al*, 2013) training sessions, have contributed to better management of SMEs and significantly increased the returns of SMEs.

*Does the existence/absence of credit source have impact on the business growth?*

As the study sought to know the impact of credit facility on the growth of MSEs, I employ the result related to this variable computed by logistic regression. The existence/absence of credit source has significant contribution on MSEs growth ( $p < 0.05$ ). The log odds of this result show the existence of credit source for the enterprises is 12.115 times more likely to grow than those with no credit source. The enough credit source available for the MSEs, the more likely to grow. The study result is in line with that of (Abebe *et al*, 2016) and (Gebremichael, 2014). The study of Babajide (2012) on the other hand is in contrast to this result who finds that access to credit source such as microfinance does not enhance growth of micro and small enterprises in Nigeria. However, other firm level characteristics such as business size and business location, are found to have positive effect on enterprise growth. The study of Abay *et al*, 2014 also contradicts with the result of this study i.e., access to credit has negative and significant effect on the MSEs growth at 5 percent level of significance.

*Does the growth of MSEs have relationship with the type of business ownership?*

The regression output gives the significance contribution of the business ownership type for the MSEs growth ( $p < 0.05$ ). This variable is one of the dummy variables taking cooperative type as a reference. The two dummies indicate significance value and the first dummy (sole proprietorship's) odd ratio is 0.056, showing that being sole proprietorship to run the business in micro and small enterprises is 0.056 times less likely to grow than being cooperative type.

## **CHAPTER FIVE**

### **Summary of findings, conclusion and Recommendation**

The main objective of this study is to analyze the determinant factors of growth of MSEs business in Jimma Town using employment growth as dependent variable and six independent variables. As per my objective the finding summary is stated below.

#### **5.1. Summary of Findings**

The data used for this analysis is gathered from 109 respondents out of which 68 (62.4%) is female respondents. Their general profile shows majority of the female workers are engaged in cafeteria and restaurant, photo copy and beauty salon. Most of the respondents' age found between 26 and 35, which shows the respondents engagement into the MSE work mostly at their active phase that might be taken as a better position to work hard and improving their business growth. Their educational background indicates more of them poses only high school level which informs the participation of more literates is little in micro and small businesses despite the ample amount of university and college complete existing in this town that are unemployment.

Before using the logistic regression model descriptive statistics was employed to check the growth difference of with the variables of interest. Accordingly from the business ownership type, the cooperative type shows better growth (74.3%) from total cooperative and 23.9% from the total ownership under investigation. Similarly our descriptive statistics of the gathered data shows the service sector as the best growing sector with 78.3% within the service sector and 16.5% within the growing enterprise from the five sectors. Additionally the enterprises given prior training shows better growth than those not given prior training and majority of the possible business service given was business advice, but employment growth appeared within the enterprise given special practical training. It is also identified that employment growth is highly affected in the absence of credit source. 30.3% from the total growing enterprise is recorded with in the enterprise poses credit source besides their growth percentage shows direct relationship with the amount of startup capital.

The mean score calculated shows the lowest mean score appears to be 0.0833 and the highest 0.8333 with the average of 0.3853. The mean variation among these scores shows the greater variation with in the amount of initial capital, variation amount (0.75) and smaller variation appears within the existence of credit source. The absence of employment growth with

smaller initial capital is very similar throughout the sample. Likewise employment growth within the manufacturing sector is relatively not similar from sample to sample when compared with others.

The result of Pearson correlation shows positive correlation between the dependent variable and independents with the correlation strength weak to moderate. The amount of initial capital is the most correlated variable with employment growth (with the r value of 0.582) and it was followed by ownership type (with the r value of 0.5), existence of credit source (with the r value of 0.474), owners training before starting the business (with the r value of 0.445), sector type (with the r value of 0.42) and possible business service attained (r=0.374) respectively.

To confirm the appropriateness of the model, I have conducted several model checks against the common logistic regression assumptions and goodness of fit check. The assumption of linearity checked by using the interaction of continuous variable with its natural logarithm. The assumption met since it assumes the insignificance of such interaction. Others are classification plot (checking for the correctly arranged growing cases on the right side and non-growing cases on the left side on histogram), Multicollinearity (by tolerance not less than 0.1 and VIF not greater than 10) computed by ordinary regression, influential cases (by using Cook's distance to be less than 1 on the scatter plot) and leverage value (with the average value needs to  $((k+1)/N)*3$ ).

The result of logistic regression gives three independent variables those significantly contributed to the employment growth. These are the amount of initial capital, the existence of credit source and the type of business ownership at p value  $<0.05$  significance level. All of the three variables have positive impact on the enterprise growth. Except for the two dichotomous variables (existence of credit source and whether or not prior training given to the MSEs), I used the dummy variables (sector type dummy, ownership type dummy, dummy for initial amount of capital and for the possible business service attained by the enterprises).

We find in this study the more existence of the credit source for MSEs the more likely is the enterprise growth. The existence of the credit source for every enterprise will change the log odd of enterprise growth by 2.494. The odds ratio of this variable is 12.115. This tells us that the MSEs those have credit source are 12.115 times more likely to grow than those with no credit source. The amount of initial capital of the enterprises to start the business was positively related with the employment growth. Starting the MSEs business with initial capital amount (Birr1-5000) will change the log odds of the enterprises growth by (-4.658).

Likewise starting business with initial capital amount (Birr5001-10000) will change the log odds of the enterprises growth by the (-2.869).

The type of business ownership also played significance role in MSEs growth. The B value of the dummy (1) of this variable (-2.89) shows being sole proprietor ship when compared to cooperative type will change the log odds of employment growth by (-2.89). The general idea of this factor is by making cooperative type of ownership the reference ownership, moving from cooperative type to sole proprietorship would decrease the MSEs growth. The other three variables were left from interpretation because of their insignificance. But their coefficients' and odds ratios' description is as displayed above.

## **5.2. Conclusion**

As the emphasis to investigate the determinant factors of MSEs growth in Jimma town, this work ends with the following conclusion. The study used quantitative type of research i.e., one time data gathered from 109 respondents out of the 113 total questionnaire plans which is 96.5% of response rate. Binary logistic regression is used for analysis using SPSS software. Basic logistic regression assumptions and goodness of fit check conducted before entering into logistic regression analysis. Accordingly the result shows three variables significantly contributed for the growth of MSEs in Jimma town and the others three variables left insignificant. The significant variables are the amount of initial capital, the existence of credit source and the type of business ownership. Owners'/managers' training before starting the business, sector type and the possible business service attained by the enterprises were not significant in this study.

The size of initial capital plays a positive role in the growth of MSEs. The higher the amount of initial capital, the more likely is the growth of MSEs. The model revealed that when the business started with smaller capital amount (Bir1-5000), the odds of experiencing employment growth is reduced by 99% and when with capital amount (Bir100001-20000), the odds of experiencing growth is reduced by 87.5% compared to the capital amount (20001-50000). I rose above that it is in agreement with (Woldeyohanes, 2013), (Tefera *et al*, 2013) and (Seyoum *et al*, 2016). The existence of credit source appeared as engine for the growth of MSEs in Jimma town. As they possess credit source, their growth would step forward. The result is consistent with that of (Abebe *et al*, 2016) and (Gebremichael, 2014). The MSEs working in cooperative type show more employment growth than other types (sole proprietorship and partnership).

### **5.3. Recommendation**

It is observed from the analysis that the initial capital amount influences the employment growth. The credit source also appeared the greatest determinant here. The logic is if there is no adequate credit source the MSEs experience problem of initial capital. Credit support is provided to MSEs when they got legal certificate and legal personality in conducting their business from the appropriate body of the government. Informal sectors are not subject to be supported by government and other institutions. Even though MSEs registered formally by the government office of MSEs, still there exist the step to get credit from MFIs and other sources. Based up on this study I need to recommend the following.

It is better to make easy and flexible the access to credit source for all sole proprietorship, partnership or cooperative. Since this sector is the first to reduce unemployment, the government needs to give attention to the any factor that make strapping of MSEs growth. Additionally not only making the credit source accessible for all, but also providing the appropriate capital amount according to the environmental context. That means the result of this study shows that more chance of growing is related with higher initial capital. But, the value of given money may be different from place to place and time to time. Also when come to enterprises higher capital for service sector may not be higher capital for manufacturing sector. Moreover, the amount used to purchase a given commodity last is exactly different from the amount used to purchase the same commodity this year. Furthermore, it is preferable to not taking into account the number of members in providing credit since this is related with limiting the amount provided based on the member. This study suggests as alternative taking into account how the intended work is.

MSEs Owners also need to strive in order to create better relationship with credit source/institutions, waiting only the government provision is not enough to cover their credit demand. They must have strong relation with financial institutions and banks. For the new comers it is better to handle the higher initial capital amount since at this time it is about laying down of the base of their business, the base needs to be strong enough to stay un staggered up on awesome conditions. In general they must hold appropriate capital amount to retain their business in industry, to push the business growth forward and above all to survive from die out of the business.

In order to facilitate access to credit for MSEs, banks and MFIs need to allocate a certain portion of their loan-able funds for MSEs. This has to be supported by special lending and

repayment arrangements. In view of the fact that group cannot have the same thinking level, attitude and commitment as there are personal differences, therefore institutes should allow individual lending systems besides the ordinary group/cooperative lending system. Financial institutions need to regulate the interest rate charged on MSE loan and simplifying loan application process as this may be the reason for fear of interest rate and loan application process to ask loan by themselves. They also need to modify their reform on capital size according to the real environment and increase in amounts of loans.

#### **5.4. Limitation of the study**

This study was conducted on MSEs growth in Jimma Town, which poses similar structure with MSEs throughout the country, but the finding of the study may not fully represent them due to variations in environmental factors. Also, the respondent in this study was sample from each enterprise; the sampling unit under study may not be able to fully generalize to a large population of each town of the other region. This study was mainly focused on the effect of internal and external factors on employment growth by using only six selected variables but there might have factors/variables beyond these that may determine employment growth and those factors were not addressed by this study. The other one is the use of employment growth as a measure of MSEs growth, but MSEs growth measure is not limited to only employment growth. Sales growth or capital growth can measure MSEs growth. This study lacks the coverage of other measures of growth.

#### **5.5. Direction for further research**

In this study I have used only the employment growth as dependent variable and few variables of external and internal factors as independent variables. It needs to conduct further research in the future by using both sales growth and capital growth separately or both variables at once to measure MSEs growth. Similarly it becomes more attractive if the researcher incorporates employment growth to compare the three dependent variables when exposed to the same independent variables. Moreover, there is no study conducted yet using these three dependent variables at once as measure of MSEs growth especially with more independent variables beyond the one used in this study that needs comprehensive research with large sample size.



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## APPENDIXES

### Questionnaire to be filled by Entrepreneurs/owners/managers of MSEs

Jimma University  
College of Business and Economics

Program: Masters of Business Administration (MBA)

The purpose of this questionnaire is to gather primary data in order to assess the condition of micro and small enterprises with the intention of analyzing determinant factors of growth of enterprises in Jimma Town. The researcher is grateful for your cooperation and assures you that all the information gathered will be kept confidential. You don't need to write your name on the questionnaire and since the data is processed and analyzed in aggregation your individual answer cannot be separately identified.

Your cooperation in giving genuine and frank answers in the questionnaire is highly crucial to obtain relevant and reliable information for the success of this study. Thank you in advance for your cooperation.

#### Instructions

No need of writing your name

For Close-ended questions indicate your answers by marking (X) one in the appropriate choice.

If you have comments or if you want to provide further explanations, please use the space provided at the end of the questionnaire

Questionnaire Code: \_\_\_\_\_

Kebele \_\_\_\_\_

No	Questions	Please circle the most appropriate answer
<b>Entrepreneur's/manager's characteristics</b>		
1.	Sex of the entrepreneur	<input type="checkbox"/> 1. Male <input type="checkbox"/> 2. Female
2.	Age of the Entrepreneur	<input type="checkbox"/> 1. Below 25 years old <input type="checkbox"/> 2. 26 – 35 years old <input type="checkbox"/> 3. 36 – 45 years old <input type="checkbox"/> 4. Above 46 years old

3. Level of education	<input type="checkbox"/> 1. No formal education <input type="checkbox"/> 2. Primary school Grade 1 to 4 <input type="checkbox"/> 3. Primary school Grade 5 to 8 <input type="checkbox"/> 4. Secondary school <input type="checkbox"/> 5. Vocational school <input type="checkbox"/> 6. University / college
4. Where were you living exactly before you start this enterprises	<input type="checkbox"/> 1. In this part of town (kebele) <input type="checkbox"/> 2. Elsewhere in Jimma Town <input type="checkbox"/> 3. Out of Jimma <input type="checkbox"/> 4. Abroad of Ethiopia
5. Did you get any training before starting this business?	<input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
6. How did you primarily obtain relevant experience of this enterprise	<input type="checkbox"/> 1. From working in non-government organization <input type="checkbox"/> 2. From my previous experience as an employee <input type="checkbox"/> 3. Inherited from family <input type="checkbox"/> 4. Gathering information <input type="checkbox"/> 5. School education <input type="checkbox"/> 6. No prior experience <input type="checkbox"/> 7. Other, please specify
7. From where you come to this job?	<input type="checkbox"/> 1. Similar type of job with this <input type="checkbox"/> 2. Directly from education <input type="checkbox"/> 3. I was unemployment
8. Do you owned now another job out of this?	<input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
9. What is the form of ownership?	<input type="checkbox"/> 1. Sole proprietorship <input type="checkbox"/> 2. Partnership <input type="checkbox"/> 3. Cooperative <input type="checkbox"/> 4. other



**Please use this information to answer question number “10”**

**Micro Enterprise category by sector**

**Manufacturing** (metal works, wood works including furniture, traditional hand crafts and jeweler, construction material production)

**Service** (cafeteria and restaurant, urban greenery, urban cleaning, maintenance services, beauty salon, electronics, decoration, internet including photo copier, garage and assembly works)

**Trade** (whole seller, retail shop, rwa material supply)

**Construction** (contractor, subcontractor, cobble stone worker, subcontracting for

- 10 In which sector is your enterprise engaged?
1. Manufacturing
2. Service
3. Trade
4. Construction

11. When was the enterprise established
1. Less than 2 years
2. 2 – 5 years
3. 6 – 10 years
4. Greater than 10 years

12. What is the initial and current capital of the enterprise? Answer in ETB
1. Initial \_\_\_\_\_
2. Current \_\_\_\_\_

- 13 Did the enterprise gain net profit last year
1. Yes
2. No

14	Please fill the number of employees working with you from 2013-2017	2013	2014	2015	2016	2017/18	total

- 15 Where did you get the startup capital?
1. Government
2. Own contribution
3. Government and own contribution
4. other

- 16 Do you have source for credit?
1. Yes
2. No

17	Specify major source to finance your business if your answer for number 16 is yes (more than one answer can possible)	<input type="checkbox"/> 1. MFI <input type="checkbox"/> 2. Bank <input type="checkbox"/> 3. Private investor <input type="checkbox"/> 4. Other source																																																																								
18	Where did you get the working premises?	<input type="checkbox"/> 1. Government <input type="checkbox"/> 2. Rented <input type="checkbox"/> 3. Family																																																																								
19	Please specify the equipment purchased during 2013-2017. Show by "X" under the year of purchase	<table border="1"> <thead> <tr> <th>Before 2013</th> <th>2013</th> <th>2014</th> <th>2015</th> <th>2016</th> <th>2017/18</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Chairs</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Tables</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Refrigerator</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Shelf</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Bed</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Sofa</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Television</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Working tools</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>House/better shelter</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Others specify</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Before 2013	2013	2014	2015	2016	2017/18							Chairs						Tables						Refrigerator						Shelf						Bed						Sofa						Television						Working tools						House/better shelter						Others specify					
Before 2013	2013	2014	2015	2016	2017/18																																																																					
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Working tools																																																																										
House/better shelter																																																																										
Others specify																																																																										
20	With which institution/s you have linkage with? You can select more than one institution	<input type="checkbox"/> 1. Government institution <input type="checkbox"/> 2. Large firms <input type="checkbox"/> 3. Private organization																																																																								
21	Which business service you got from external bodies?	<input type="checkbox"/> 1. Business advise <input type="checkbox"/> 2. Short-term training <input type="checkbox"/> 3. Special practical training																																																																								
22	What is the major source of raw materials you use	<input type="checkbox"/> 1. Locally produced raw materials <input type="checkbox"/> 2. Imported raw materials <input type="checkbox"/> 3. Equal source of local and imported																																																																								
23.	If your answer to question no. 22 is "2" or "3", please explain why you prefer imported materials?	<input type="checkbox"/> 1. Lower price <input type="checkbox"/> 2. Quality material <input type="checkbox"/> 3. Easily availability																																																																								

24	The market for final products are:	<input type="checkbox"/> 1. In Jimma city only <input type="checkbox"/> 2. Throughout Jimma zone <input type="checkbox"/> 3. National market <input type="checkbox"/> 3. Export
25	How is the market for your products as per your expectation	<input type="checkbox"/> 1. Higher sale <input type="checkbox"/> 2. Expectation level <input type="checkbox"/> 3. Lower sale <input type="checkbox"/> 4. No sale
26.	Are there recruited employees in your enterprise	<input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
27	What is the category of the employees (more than one answer is possible)	<input type="checkbox"/> 1. Paid workers <input type="checkbox"/> 2. Not paid part time workers <input type="checkbox"/> 3. Workers less than 18 years of age <input type="checkbox"/> 4. Non-paid workers as relatives <input type="checkbox"/> 5. Apprentice
28.	How is the proportion of workers in the higher paid categories or higher level?	<input type="checkbox"/> 1. More are male workers <input type="checkbox"/> 2. More are female workers <input type="checkbox"/> 3. Equal number of male and female workers
29	Which energy efficient management practices do you apply	<input type="checkbox"/> 1. Redesign your process to save energy <input type="checkbox"/> 2. Train staff <input type="checkbox"/> 3. System off when not in use <input type="checkbox"/> 4. I don't practice
30	Which water efficient management practices did you use	<input type="checkbox"/> 1. Substitute potable water use with other sources of water <input type="checkbox"/> 2. Minimize water usage <input type="checkbox"/> 3. Treat and reuse water <input type="checkbox"/> 4. I don't practice

31	What efficient material usage practice you use	<input type="checkbox"/> 1. Minimize material needed with continuous improvement <input type="checkbox"/> 2. Minimize wastage <input type="checkbox"/> 3. Use recycle <input type="checkbox"/> 4. Other specify
32	How do you treat solid material waste of your enterprise	<input type="checkbox"/> 1. are recycled <input type="checkbox"/> 2. are sold as residual <input type="checkbox"/> 3. dispose them with no treatment
33	How often do you do maintenance of your machines and equipment	<input type="checkbox"/> 1. Regularly <input type="checkbox"/> 2. When it fails to work properly <input type="checkbox"/> 3. Other specify
34	What is your opinion about the linkage between sustainability performance and financial performance	<input type="checkbox"/> 1. There is strong link <input type="checkbox"/> 2. There is weak link <input type="checkbox"/> 3. There is no link <input type="checkbox"/> 4. I don't know

Researcher Name: ASHIM KEDIR      Signiture \_\_\_\_\_, Date: April, 2018

**Gaafannoo hojjettoota/miseensota Waldaalee IMX'n guutamu**

**Yuunivarsitii Jimmaa**

**Koolleejjii Biizinesii fi Ikkonoomiksii**

**Sagantaa: MaasteriiBulchiinsaBiiziinesii**

Kaayyoongaafannookanaahaal-dureewwan (sababoota)

guddinawaldaaleeInterpiraayiziimaaykiroo fi

xixiqaaqorachuufdeetaasadarkaajalqabaafunaanuudha.

fi xixiqaaqorachuufdeetaasadarkaajalqabaafunaanuudha.

Qorataangamtaakeessaniifgalataguddaaisiniifqabaachuuisaaisaaodeeffannoonwalittiqabamuhu

ndinuucciitiinkanqabamuta'uunimirkaneessa.

Deetaanhundinuuwalittidabalamuuniddootokkottihujjeeffamee (processed)

waanxiinxalamuufdeebiindhuunfaakeessaniiqofaattiaddahinbahu,

Maqaakeessanisgaafannooirrattibarreessuunisirinraahineegamu.

Milkaa'inaqorannookanaatiifodeeffannoobarbaachisaa fi

amanamaaargachuufgumaachikeessandeebiidhugaa fi

ifaata'eedebisuukeessattibaay'eemurteessaadha. Gumaachakeessaniifbaay'eegalatoomaa!

**Akkaataaitti guutamu**

- Maqaakeessanbarreessuunhinbarbaachisu
- Gaaffiiwwanfilannoodhaandhiyaataniifkandeebiisirriidhajettan (X)  
ittigochuunagarsiisaa
- Yaadanuukennuufbarbaaddanakkasumasdabalataanrakkoowaldaankeessanqabucaalaatti  
ibsuu fi  
rakkoohinka'inhafekaasuufbakkaduwwaadhumagaaffannookanaairrajirufayyadamaa

Lakk. addaagaafannoo: \_\_\_\_\_

Ganda: \_\_\_\_\_

Lakk	Gaaffiiwwan	Filannoowwan (deebiikeessaniifsaanduqaqophaa'ekeessattimallattoo agarsiisaa)	(X)'n
1	Saala	<input type="checkbox"/> 1.dhiira <input type="checkbox"/> 2.dub	
2	Umrii	<input type="checkbox"/> 1.waggaa 25 <input type="checkbox"/> 3.36-45 <input type="checkbox"/> 2.waggaa 26-35 <input type="checkbox"/> 4.waggaa 46 ol	

3

Sadarkaabarnootaa

- 1.barnoota idileekanhinqabne
- 2.barnoota sadarkaa 1<sup>ffaa</sup>kutaa 1-4
- 3.barnoota sadarkaa 1<sup>ffaa</sup>kutaa 5-8
- 4.barnoota sadarkaa 2<sup>ffaa</sup>
- 5.barnoota gannaa
- 6.Yuunivesitii/kolleejjii
- 7.kan biroonyoojiraatanibsi

4

Garawaldaakanaattiutuuhindhu fanduraeessajiraataaturtan?

- 1.kutaa magaalaakanammakeessajiraadhu
- 2.bakkeewwan addaaddaamag.Jimmaa
- 3.magaalaa Jimmaanala
- 4.Itiyoophiyaan ala

5

Utuuhojii kana hineegalinduraleenjiinargattan jirra?

- 1.eeyyee
- 2.lakkii

6

Hojiikanaafmuuxannoobarbaac hisaaeessaaargattan?

- 1.dhaabbata mit-mootummaakeessahojjechuun
- 2.muuxannoo hojjetaakanaanduraqabuurraa
- 3.maatii irraa
- 4.odeeffannoo walittiqabuun
- 5.barumsa manabarnootaairraa
- 6.muuxannoo duraaniihinqabu
- 7.kan biraayoojiraateibsaa

7

Hojiikanattikandhuftanmaalirra ayi?

- 1.hojii wal-fakkaataaakkasiiirraay
- 2.kallattiidhaan barnootairraay
- 3.hoji-dhabaan ture

8

Yeroammaahojiikanaanalattih ojiinbiraacaqbandanjirra?

- 1.eeyyee
- 2.lakkii

9

Gosaabbummaakeessaaisakamj alattiramadama?

- 1.kan namatokkoqofaa
- 2.gamtaa
- 3.waldaq
- 4.kan biroo

Gaaffiilakk. "10" deebisuufodeeffannooarmaangadiifayyadamaa

Qoodama Waldaalee IMX sectoraan

**Oomisha/warshaa/manufaakchariingii** (hojiisibiilaa, hojiimukaafarniicheriidabalatee, hojiiharkaa fi ogummaaaddaaddaa, oomishameeshaaleeijaarsaa)

**Tajaajilakennitoota (service)** (kaaffee fi ristooraantii, magariisummaamagaalaa, qulqullinamagaalaa, tajaajilasuphaa, manamiidhaginaa, elektirooniksii, bareedina, internetiihojiifootoo-koppiidabalatee, gaaraajii)

**Daldala** (jimlaa, qinxaboo, dhiyeessami'adheedhii)

**Ijaarsa** (hojiijaarsaaabbummaanfuuchuu, qoodaniihangata'ehojjechuufwaliigaluu, hojjetaakoobilistoonii, ijaarsabu'uuraaleemisoomaa)

**Qonnaamagaalaa** (horsiisalukkuu, oomishadammaa, horsiisalooniiammayyaa)

10	Hojiinkeessanseektarakamjalatti ramadama	<input type="checkbox"/> 1.Oomisha/warshaa/manufaakchariingii <input type="checkbox"/> 2.tajiila kennitoota <input type="checkbox"/> 3.daldala <input type="checkbox"/> 4.ijaarsa <input type="checkbox"/> 5.qonna magaalaa																		
11	Yeroonhundeeffamawaldichaay oom?	<input type="checkbox"/> 1.waggaa 2 gadi <input type="checkbox"/> 2.waggaa 2-5 <input type="checkbox"/> 3.waggaa 6-10 <input type="checkbox"/> 4.waggaa 10 ol																		
12	Kaappitaalliittiinjalqabdanhangamt ure? Kaappitaallikeessanyerooammaaho? (deebiinkeessanqarshiinta'a)	<input type="checkbox"/> 1.kaappitaala jalqabaa_____ <input type="checkbox"/> 2.kaappitaala yerooammaa_____																		
13	Waggaadarbewaldaanykn interpiraayiziinkeessanbu'aaargate eraa?	<input type="checkbox"/> 1.eeyyee <input type="checkbox"/> 2.lakkii																		
14	Dhiifama! Ragaabaay' inahojjetaawaliinhajjet aajirtanii (bara 2006-2010) guutaa	<table border="1"> <thead> <tr> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2006	2007	2008	2009	2010													
2006	2007	2008	2009	2010																
15	Kaappitaalahojiittiinjalqabdane essaaargattan?	<input type="checkbox"/> 1.mootummaa <input type="checkbox"/> 2.kan mataaofii <input type="checkbox"/> 3.mootummaa fi kanmataaofii <input type="checkbox"/> 4.kan biroo																		
16	Maddaliqiiniqabduu?	<input type="checkbox"/> 1.eeyyee <input type="checkbox"/> 2.lakkii																		
17	Gaaffii lakk.16'f deebiinkeessanyooeeyyeeta'em addaliqiikeessaniiaddabaasaa! (deebiitokkoolkennuunnidanda 'ama)	<input type="checkbox"/> 1.dhaabbata maaykiroofaayinaansiikanakkawaldaaliqii fi qusannaaOromiyaa <input type="checkbox"/> 2.baankii <input type="checkbox"/> 3.abbaa qabeenyaadhuunfaa <input type="checkbox"/> 4.madda biroo																		
18	Bakkahojjiiessaaargattan?	<input type="checkbox"/> 1.mootummaa <input type="checkbox"/> 2.kiraa <input type="checkbox"/> 3.maatii irraa																		
19	Dhiifama! Meeshaaleebaroota 2006-2010 keessattibittanmallattoo "X" barameshichibitamejalattigochuunaddaba asaa Teessoohirkoo	<table border="1"> <thead> <tr> <th>2006</th> <th>2006</th> <th>2007</th> <th>2008</th> <th>2009</th> <th>2010</th> </tr> </thead> <tbody> <tr> <td>dura</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	2006	2006	2007	2008	2009	2010	dura											
2006	2006	2007	2008	2009	2010															
dura																				

xarapheezaa						
Qabbaneessaa(refrigerator)						
siree						
televiijinii						
Teessoospoonjii (soofaa)						
Meeshaaleehojii						
Manajireenyaa						
Zalangaa (shelf)						
Kanbirooyoojiraateibsaa						

20

Dhaabbileekunniinkeessaakamwaliinwalitt idhufeenyaqabduu? Dhaabbatatokkoofilachuunisnidanda'ama

1. Dhaabbata mootummaa  
 2. Dhaabbileegurguddoomitimootummaa  
 3. Dhaabbileedhuunfaa

21

Tajaajilamaaliiqaamoleewaldaakeessaniinalata'anirraargattu?

1. Tajaajilagorsaa  
 2. Leenjiiyeroogabaabaa  
 3. Leenjiolaanaakanqabatamaanhojjetaniiagarsiisu of keessaaqabu

22

Mi'adheedhihojjiikeessaniifmaddiolaanaan isaaessaay?

1. Naannookeessattikanargamu  
 2. Kanbiyyaaalairraagalu  
 3. Kannaannoo fi kanalarraagaluwal-qixafayyadamna

23

Deebiigaaffii '22'f kennitanfilannoo '2' ykn '3' yoota'emaaliifakkami'adheedhiialaagalufil attanibsaa!

1. Gatiigadaanaa  
 2. Qulqullinaolaanaa  
 3. Salphaattiwaanargamuuf

24

Oomishakeessangabaakamirrattigurgurtu?

1. Magaalaa Jimmaa keessatti  
 2. Godina Jimmaa waliigalatti  
 3. Gabaaguddaaakkabiyyaattijiruirratti  
 4. Gabaabiyyaalaa  
 5. Kanbiraayoojiraateibsaa

25

Gabaanoomishakeessaniikkaisinittiyaaddaniit urtanwaliinyooilalamuhangam?

1. Gurgurtaaolaanaa  
 2. Akkaataayaadameenwal-qixa  
 3. Gadaanaa  
 4. Gabaanhinjiru  
 5. Kanbiraanyoojiraateibsaa



26	Waldaakeessaniifhojjetaanqacaramejiraa?	<input type="checkbox"/> 1. Eeyyee <input type="checkbox"/> 2. Lakkii
27	GostiHojjataakeessaniifilannooisakamjalattira madama? Filannootokkooolguutuunnidanda'ama	<input type="checkbox"/> 1. Kankaffaltiinkaffalamuuf <input type="checkbox"/> 2. Kanhinkaffalamneef, hojjetaasa'aatiinqoodameefiihojjetuudha <input type="checkbox"/> 3. Hojjettoota umriiwaggaa 18'n gadii <input type="checkbox"/> 4. Hojjetaafiradhiigaa, kanhinkaffalamneef <input type="checkbox"/> 5. Leenjiogummaairakanjiran <input type="checkbox"/> 6. Kan biro
28	Madaalli kaffaltiiolaanaamaalfakkaata? hojjettoota	<input type="checkbox"/> 1. Garricaalu hojjettoota dhiiraati <input type="checkbox"/> 2. Garricaalu hojjettoota dhalaati <input type="checkbox"/> 3. Baay'innihojjetaadhiiraa fi dubraawal-qixa <input type="checkbox"/> 4. Ibsuunhineeyyemamu
29	Mala ittifayyadamaanniisaaga'umsaqabukeessaa isakamiinfayyadamtu?	<input type="checkbox"/> 1. Anniisaaqusachuufadeemsaahojjichaaorra-deebiinwixineessuu <input type="checkbox"/> 2. Hojjetaaleenjisu <input type="checkbox"/> 3. Akkahojiindhaabbateensirnaanniisaacufuu <input type="checkbox"/> 4. Tokkolleefayyadamneehinbeeknu <input type="checkbox"/> 5. Kanbiroonyoojiraate
30	Malootabishaanqusatanisakamfayyadamtu?	<input type="checkbox"/> 1. Bishaanboollaamadootakaanbakkabuus uunfayyadamuu <input type="checkbox"/> 2. Ittifayyadamabishaaniihir'isuu <input type="checkbox"/> 3. Mala bishaanqulqulleessuunirradeebiinfayyadamuu <input type="checkbox"/> 4. Maloota kana fayyadameehinbeeku <input type="checkbox"/> 5. Kan biro
31	Malootafooyya'aaittifayyadamawantoo taakkami'adheedhiittigargaaraniiffayyadamtan?	<input type="checkbox"/> 1. Yerooyeroottihaalahojiifooyyessuunhangami'abarbaachisuuhir'isuu <input type="checkbox"/> 2. Hangami'aabalfaattidabalamuhir'isuu <input type="checkbox"/> 3. Mala irradeebiinfayyadamuu <input type="checkbox"/> 4. Kan biro
32	Balfajjaboowaldaakeessaniikkamiin miidhaanaannoakkahinfidnegootu	<input type="checkbox"/> 1. Irradeebiinfaayidaaakkakennangochuun <input type="checkbox"/> 2. Akkahafteemi'aata'aniigurguramu <input type="checkbox"/> 3. Akkumasanaandhabamsiisuu <input type="checkbox"/> 4. Kan biro
33	Suphaamaashinii fi meeshaaleehojiikeessaniifoolanhangam raawwattu?	<input type="checkbox"/> 1. Yerooyerootti <input type="checkbox"/> 2. Yerooinnisirriittihojjechuudidu <input type="checkbox"/> 3.

- 
- 34 Walittidhufeenyaraawwii/taateewwanit  
ti-fufiinsaa fi  
raawwii/taateewwanfaayinaansiilaalch  
iseeyaadiakkamiiqabduu?
- 1. Walittidhufeenyacimaatujira
  - 2. Walittidhufeenyalaafaatujira
  - 3. Walittidhufeenyihinjiru
  - 4. Waa'eekanaahinbeeku
- 

Maqaaqorataa:ASHIIM

KADIR

Mallattoo: \_\_\_\_\_

Bitootessa, bara 2010