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## Determinants of the Growth of MSEs in Ethiopia: The Case Study of Bahir Dar City Administration

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### Abstract:

*This paper aimed to examine the determinant factors that affect growth of MSEs in Bahir Dar city administration, Ethiopia. Since those firms play significant role on one's country economy. However, MSEs currently facing various challenges which hinder their growth. Some researchers conducted on this issue; however, they focused on trade and services by using some other determinants. This study therefore, tried to find out the determinants of growth of MSEs, specifically; manufacturing, construction and urban agriculture in the Bahir Dar city administration for the year 2005E.c. The study incorporated seven determinants and found that five of them (access to credit, firm size, firm age, educational level and initial investment) positively and significantly affected growth of MSEs of Bahir Dar city administration. However, the rest two variables (access to land and gender of the owner) have no significant effect on firm growth. Generally, firms are highly challenged by the above significant variables both the government and owner of the business should work hand in hand to improve financial position and educational level of both owner and employees of MSEs in the city.*

**Keywords:** Firm growth, determinant factors, access to land, and access to credit finance

### 1. Introduction

This chapter introduce the historical back ground of the research basically, statement of the problem, objectives of the study, research hypothesis, study delimitation, study limitation, significance of the study, organization and ethical considerations during and after research is conducted. Those parts are present in a detailed manner as follows.

#### 1.1. Background of the Study

Peoples and the word economy have a strong relationship; they actually perform enormous activities to strengthen their economy and to kickoff forward their sustainable development over the globe (World Bank report, 2011). Although many countries of the world economic development have been supporting through several sources of economic arenas. The imbalance between the economy and population size throughout the world is therefore the current headache of many developed and developing countries, due to these difficulties, unemployment rate inflated radically, many countries employed various solutions to eradicate such critical problems; like creating job opportunity through the organization of micro, small and medium scale businesses (Dimelis and Louri, et al., 2013).

In many developed and developing countries' governments put solutions that can assure them minimum unemployment rate in their soil. In world history, countries have been using labor-intensive firms and companies which make countries economy to grow up and sustainable. Studies have suggested that SMEs need large number of population and they also contribute indispensable values to once country economy through employment generation (Ariyo, 2008; and Ayozie, et al., 2010). According to Mbuta and Nkandela (1998), the importance of MSMEs in contributing to job creation and output growth is now widely accepted in both developed and developing countries. In developed countries like Japan MSMEs contributes for more than 98% of all business establishments and employ over 69% of the total workforce (Jasra, 2011); on the same issues in New Zealand, SMEs covers 86% of its business firms and holds 27% of the total employment (Robert and Leo, 2003). According to Chong (2012), in developing countries such as Malaysia, MSEs have played a prominent role in their economy. Specially, in Malaysia Over 90% of companies are MSEs which highly contributing to the economy of the country.

In the continent Africa, MSEs have a vital significance on the overall economic growth; in South Africa these firms generated more than 55% of all jobs and contribute 22% of the country's GDP (Kim, 2011). On particular interest in the process of expansion of these enterprises from micro or small into a medium size, as it is when they become medium-sized that growth-oriented MSEs make tangible contribution to economic growth and job creation. While some governments had formulated policies aimed at facilitating, empowering the growth and development, and performance of the MSEs, others had focused on assisting the MSEs to grow through soft loans and other fiscal incentives in order to enhance the socio-economic development of the country; like alleviating poverty, employment generation, enhance human development, and improve social welfare of the people.

All the foretasted benefits of MSEs cannot be achieved without the direct intervention of the governments and financial institutions. Over the years, a number of African countries have been formulated policies to develop MSEs (Oni & Daniya, 2012). For instance, Nigerian

government formulated supportive department for the MSEs on financial and other regulatory and supervisory framework in 2005. Besides that, it was introduced industries credit scheme (ICS) in 1971 as a revolving grant by the federal and state governments in Nigeria to assist in meeting the credit needs of MSEs on a relatively more liberal condition than in private leading institutions (Oni & Daniya et al., 2012). Although this sector has positive impact on the growth by making credit available to MSEs, they have financial difficulties in getting credit from formal financial institutions over the nation (Duru and Kehinde, 2012). Besides that, other African countries like Ethiopia also have lacked with access to credit and premises (Kim, et al. 2011).

In Ethiopia, MSEs introduced after the fall of the military regime in 1991, this period was the new era for Ethiopian because it was enlightened with new democratic political ideology in the country. Micro, small and medium scale enterprises were started well following the transitional government has been introduced the new free market economy in the country to enhancing the economic objectives such as diminishing unemployment and maximizing sales volume. However, some literatures stated that, MSEs are constrained with plenty of problems. For instance, Kim, et al. (2011) has conducted their studies on MSEs in six African countries (Kenya, Rwanda, Tanzania, Burundi, South Africa and Ethiopia), and their problems by comparing with the Asian countries. He stated in his literature that, one of the east African countries Ethiopia has lacked with the governmental capacity for the necessary support, impose harsh regulations, higher tax rate and lack of access to credit for the MSEs in the country; this makes it difficult for MSEs to emerge from the local sector. World Bank report (2010) also assessed the challenges of MSEs in Ethiopia like, lack of access to land, lack of access to credit finance from formal financial institutions, lack of human capital are the main obstacles for the growth of MSEs in the country according to the report. Besides that, in northern part of Ethiopia, in Tigray micro and small enterprises are facing many challenges in their growth scheme, which are therefore, the access to external finance, lack of premises for production and selling products, and the like (Habtamu, and Aregawi et al., 2013).

City administrations and the regions of Ethiopia have been looking for the new introduction and expansion of MSEs. The Amhara regional state is also one of the nine regions in Ethiopia; which in the northern part of the country, adopted and therefore currently practicing the MSEs in alleviating poverty in the region through creating new job opportunities for the poor, women and the new graduates. MSEs Annual report of 2005E.c for the Amhara regional state stated that 341,954 unemployed citizens are involved both in permanent and daily workers in the MSEs within the region. However, the report included that even if the firms have been enhancing large number of employees, they have constrained with credit access and lack premises and land for production and selling their products.

This study was therefore, focusing on MSEs (manufacturing, construction and urban agriculture) in Bahir Dar city administration. Bahir Dar is the capital city of the Amhara regional state, which is one of the nine regions in Ethiopia that currently awakening its' people to be involved in poverty reduction and creating sustainable economy in the city, and transforming their city and the region in to the middle-income level. The main point of the study is assessing the determinants of growth of the three categories of MSEs in this city. As described above, several countries of the world enhancing MSEs as a basic source of their development by creating job opportunity, and using as the means for fair economic distribution between citizens. Therefore, the Bahir Dar city administration also facilitating peoples mainly, youth and women, and university graduates to engage in small and medium scale enterprise.

### *1.2. Statement of the Problem*

MSEs in the globe have positive impact on job creation, fair economic distribution, poverty alleviation, and empowering women and youth to involve in the economic arena; both in developed and developing countries, MSEs have significance role in empowering the economy and economic distribution between the rich and the poor. One of the developed countries in Japan over 69% of the total workforce employed in MSMEs (Jasra, et al. 2011).

MSEs have many challenges in improving their growth in many African countries. In many African countries, they have enormous barriers to their growth and development, which is therefore, shortage of both equity and debt financing (Ahiawodzi and Adade, 2012). In addition, the authors of this article stated that, MSEs are currently facing with lack of access to capital and adequate financial resources for their growth and development.

Ethiopia is one of the fastest growing countries in the world according to the World Bank report (2012). But the development is not withstanding of all economic aspects, mainly the labor intensive like MSEs where not supporting the economy due to lack of supporting by management skills, fund rising opportunities, access to credit, and lack of access to land and market accesses were the serious problems. According to World Bank report (2012), the contribution of MSEs in Ethiopian economy in the year 2005 to 2011 was only 4% of the total economic growth; this shows that, the government of Ethiopia has not been focusing on the main back bone of the economy and has no sufficient financial support for these firms. However, starting 2011-2013 the contribution of MSEs to the national economy increased to 7-8% (annual report MOT, 2013). Although it has an increment rate on contribution to the national economy, the report cited as it has various challenges; such as lack of access to credit finance, access to land, lack of educational performance and technical qualities, and lack of market access.

In addition to the above researches and reports, Kim (2011) also conducted a research on MSEs in six African countries (Kenya, Rwanda, Tanzania, Burundi, South Africa and Ethiopia). MSEs have plenty of problems, like lack of access to land, finance, and tighten bureaucracy to get license are the main challenges. His research focused on Ethiopian MSEs and their challenges to grow are strong bureaucracy and tighten to get license, this is therefore negatively affect the country in scaling up the economy, as it needed. Nevertheless, this is not clear that how the lacking affect growth of small and medium scale enterprises in the nation.

Dimelis and Poulos, et al., (2013) have studied in East Java on manufacturing and retailers MSEs by using various growth determinant and strategies. Nevertheless, the researchers of this study have cited that there is controversy on determinant factors of firm growth. For instance; whether or access to credit has an effect on firm growth. Daniel and Ngwira (1993), Parker and Torres (1994), and

USAID (1998), studied on the relationship between access to growth credit and firm growth, they found that access to credit has significance effect on firm growth. Whereas Dimelis and Poulos (2013), found on their study, if we statistically controlled other variables access to credit has no appreciable effect on firm growth. The research was not included other business sectors.

Becchetti and Trovato (2010), have studied on determinants of micro and small enterprises measuring by, the growth rate on the employees within the consecutive three operation periods, which applied both description and regression analysis. The researchers employed various independent variables like firm age, size, initial capital and access to foreign market as determinant factors for growth of micro and small-scale enterprises. They found that size-age-growth have great relationship each other and the main influencing factors of growth of those firms. However, this research conducted only on manufacturing but not included other categories of MSEs.

Habtamu, and Nigus et al., (2013) have studied on the determinants of MSEs in Mekelle, Tigray city administration basically on manufacturing, service and trade sectors by considering their binary of growing and surviving and they used both primary and secondary data. They business sector, location, and management skill, but not incorporated gender of the owner, firm age, firm size and initial investment. Furthermore, they simply studied on service, trade and manufacturing; it was not included construction and urban agriculture.

The researcher therefore, identified two research gaps.

- i. Construction and urban agriculture was not covered by other researchers.
- ii. Variable such as access to land, firm age and educational level were not included in other researches
- iii. The study is also new for Bahir Dar city administration.

By taking in to consideration all, the above stated research gaps this research study is expecting to fill the gaps, using determinant factors for growth of MSEs in Bahir Dar city administration.

### *1.3. Objectives of the Study*

#### 1.3.1. General Objective

The main objective of the study is to examine the determinants of the growth of MSEs in Bahir Dar City administration.

#### 1.3.2. Specific Objectives

The paper is expecting to address the following specific objectives:

- Address the relationship between access to credit, and the growth of MSEs.
- Investigate the effect of firm age, on micro and small-scale enterprises' growth.
- Examine the effect of firm size on growth of SMEs in the city.
- Investigate the effect of access to land on growth of SMEs in Bahir Dar.
- Investigate the effect of initial investment on SMEs in Bahir Dar.
- Investigate the effect of increasing in educational level on firm growth.

### *1.4. Research Hypothesis*

The research hypothesis is withstanding the main issues of the research expected to address at the end of the research findings.

- Hypothesis 1: Access to credit has no significance effect on the growth of micro and small-scale enterprises in Bahir Dar city.
- Hypothesis 2: There is no significant relationship between the age of the firm and their growth; firm growth decreases with firm age
- Hypothesis 3: There is no significant relationship between the size of the firm and the level of growth attained; firm growth increases with firm size.
- Hypothesis 4: There is no significant relationship between the access to land and firm growth.
- Hypothesis 5: There is no significant relationship between initial investment and the level of growth attained.
- Hypothesis 6: there is no relationship between increasing in educational level and firm growth.
- Hypothesis 7: there is no relationship between gender of the owner and firm growth.

### *1.5. Significance of the Study*

Since this research is new for the city, it disseminated various importance, among the main importance are; it will contribute additional knowledge to the researchers around the Bahir Dar city, and the entire region. Besides that, it will also contribute and provides new information about MSEs for the administration and lastly it will help for owners of the firms in addressing source of problems and their recommended solutions.

### *1.6. Scope of the Study*

Scope in research study is the area and time where the researcher has conducted the research in focus. The research therefore, focused on manufacturing, construction and urban agriculture of the MSEs for the year 2008E.c in Bahir Dar city administration. The researcher was interested on those firms because they are highly labor intensive, need large amount of capital to begin and expand. Furthermore, the government gives more emphasis on providing loan, land for use and create link within the market environment.

### 1.7. Limitation of the Study

Limitation is concerning on the obstacles and shortcomings of the research while conducting and after the findings stated out. On this thesis, there were some limitations, which are affecting the completeness of the research findings. Since the research conducted in one city of the region and only on three categories of micro and small enterprises, it may not show the general picture of the micro and small scale firms in the region, specifically in the city administration; Besides that, the researcher only secondary data used. To incorporate primary data, the researcher faced challenges of reliability measure. Due to the above limitations, the researcher did not include all-important variables and the population.

### 1.8. Organization of the Paper

This paper is organized in five main chapters; chapter one is about the introduction and other sub titles, chapter-two literature review, chapter-three is methodology, sample and data collection tools, chapter four statistical data analysis and interpretations, and chapter five is concerning on concluding remarks and recommendations. At last, there are references and appendixes of the research are included.

### 1.9. Ethical Considerations

Ethical consideration is a very significant for collecting necessary and required data in which the research is carryout. Many ethical normative have performed before the actual data is collected. These ethical considerations are;

- First: the researcher brought formal and ethical clearance from Bahir Dar university faculty of business and economics accounting and finance department, next to ethical clearance takes place the researcher get paths to access different concerned bodies in the Bahir Dar city administration. Mainly, the Bahir Dar city MSE administration office process owners at last the researcher get a way to collect data from the owners of the firms and firm data management.
- Secondly: for better accessibility of the data from the firm or its' owner's researcher has informed the owners about the purpose of the study, the confidentiality of the data and information given to the researcher; this is all about getting oral consent of the data.

Generally, this ethical consideration is critical to get reliable and timely data from both primary as well as secondary data.

## 2. Literature Review

Many researches address the economic importance of micro, small and medium scale enterprises in many countries of the entire globe. Researcher of this study incorporated enormous findings and research results by other researchers; In line with the research the theoretical literature and empirical literature reviews are included as main supportive of the research findings.

### 2.1. Theoretical Literature Review

#### 2.1.1. Definition of MSEs from Different Corners

There is no universally agreed definition on micro, small and medium scale enterprises. Different countries defined SMEs in accordance with their employment, asset volume; however, in some other countries defined MSEs based on their sales turnover and number of employees working with. According to Chong (2012), Malaysia micro, small and medium scale enterprises defined through their sales turnover and/ or number of employees. They defined;

- a) Firm named as micro manufacturing organization, with full time employees of less than five or sales turnover less than RM 250,000,
- b) Firm named as micro service organization, with sales turnover less than RM 200,000 or employees less than five,
- c) Small enterprises organized with sales turnover between RM 250,000 and less than RM ten million or with the full time employees between 5 and 25, and medium enterprises organized with the sales turnover between RM ten million and RM twenty-five million or with the full time employees between 51 and 150 defined according to Malaysian.

In many other countries, SMEs defined differently than the Malaysian definition on SMEs. The European Union states traditionally have their own definition of what constitutes SMEs; for instance, the traditional definition of Germany limits only on number of employees with 250, in the same condition in Belgium but their number employees are 100. The recent European Union categorized enterprises in to three main levels which are with less than 10 employees 'micro', with less than 50 employees 'small', and those fewer than 250 employees are 'medium' (Oni & Daniya, 2012).

In the United States of America business, enterprises defined in accordance with their work force or number of employees in operation of the business, which is similar to the EU. However, the USA separate businesses in two main categories that are small enterprises, which have less than 100 employees and medium with the employees fewer than 500. This is to somehow different from the EU definition and Malaysian to.

In Ghana small and medium scale enterprises defined through various instants like employees, fixed assets and sales. However, according to the National Board for small-scale industries of Ghana applies both fixed assets and number of employees as criteria to define SMEs (Ahiawodzi and Thomas, 2012).

#### 2.1.2. MSEs in the Ethiopian Case

In Ethiopia, enterprises defined as micro, small, medium and large based on two criteria, first in terms of employee's number and second; in terms of the total capital. Thus, business enterprises classified and named as micro, small and medium scale enterprises.

This is given by micro, small and medium scale enterprises development directive No 002/2003 E.c the classification of enterprises as micro, small, medium in Ethiopia is differ from other countries' experiences. As stated above in UAS and EU member countries they mainly employees in focus, where as in Malaysia, they may use either number of employees or sales turn over. Unlike other countries, Ethiopia classified enterprises using criteria (number employees and total capital except land building). Micro enterprises are firms with employees of 1 to 5 including the owners' family; and total capital excluding the building of not exceeding ETB50,000 for service providing and ETB 100,000. Industries; Small enterprises which have employees from 6 to 30 and with the total capital excluding the building of 50,001 to 500,000 ETB for services and 100,001 to 1,500,000 ETB for industries, and medium scale enterprises are those which have not more than 100 employees and with total asset value of greater than 1.5 million ETB.

Generally, countries state enterprises in accordance with their related environment, but they have a common denominator for classifying business enterprises, which is therefore the number of employees working within the firm.

### 2.1.3. The Concept of Access to Credit

Access to credit according to Dimelis and Louri et al., (2013) is "business firms have an availability and exposure to external financing either to begin business or/to expand their operation and production capacity". Whereas Evans (1987) defined, access to credit is the getting and using borrowings from formal financial institutions. Although it defined as getting and using financial borrowing from formal financial institutions, still literatures, have many supporting and skeptical arguments about SMEs access to credit. Lending to small businesses can be seen to be time consuming and costly for banks and other financial intermediaries. Such small firms lack proper accounting procedures and owners easily mix their business and personal finances, making their financial statements often unreliable. This study considers loan applicants whose loans were approved by commercial banks as having access to credit and those whose loan application were rejected are seen not to have access to credit (Nkuah, et al., 2013). However, in our circumstance, small and medium scale enterprise has references as like as the commercial banks of the country. Therefore, access to credit is the exposition of the SMEs for financing from formal and non-formal financial institutions.

### 2.2. Firm Growth Determinants

As it indicated in the theoretical literature review above growth influenced by different determinants, which are the firm age, experiences, size, access to credit, innovation, and access to land, sales and relative number of employment in the specific production periods. The number of employees and sales volume defines growth. However, this study is normally defined growth through change in number of employees in their specific operational period, because number of employees is simple to remember and measure by owners of the firms and popular for many researches. Therefore, according to researchers and writer's growth is determined through many strategies.

#### 2.2.1. Firm Growth

According to Jennings and Beaver (1997), there is no single criterion, label or definition of growth. However, growth is therefore referred to a positive change in size, often over a period; it may also occur as a stage of maturation or process towards objective fulfillment. In many cases firm's growth depends on the developments of theories, which may support in making the path smooth, researchers testify various classes of firm growth theories. There are many theories that emphasize on the measuring of SMEs' growth. One of the models is "learning model" which is developed by Jovanovich (1982), and expanded by Pakes and Ericson (1998) which allow managers to influence their effective and efficient level via human capital formation, and to enhance firm growth. These theories are therefore, predict that the firm growth will inversely related to initial firm size and to firm age, and directly related to the level of human capital embodied in the firm's entrepreneur (Michael et al., 2010). On the other case MSEs' growth is defined by earning profits, growth in sales/turnover, growth in productivity, avoiding losses, being cost efficient, surviving in the market, or performing well compared to competitor (Jennings et al. 1997). Because, growing in turnover is the best measurement of growth. In addition to this, form of growth is mostly measurement using SME owner/managers themselves (Atsedo, et al., 2008). Growth of small and medium scale enterprises measured through sales growth, relative employment growth, assets, market shares, profits and output are the most common indicators to measure growth (Evelina et al, 2011). Evans (1987) is defined growth through number of employees and sales volume but he concludes that number of employees is the better measurement for firm growth. Even if measuring firm growth varies among researchers and authors, most researchers and researches used the change in employment number to measures SMSEs growth. Nevertheless, the rest indicator such as output and market shares varies greatly within industries and therefore is difficult to compare. Total asset also depends on the industry's capital intensity and changes over time and profit is not that relevant unless measuring size over a long period. Therefore, sales and employment are the two most important indicators measuring firm's size and growth. However, the researcher measured firm growth through employment growth, because this is easy to remember and measure by managers of the organizations, and other measurements like sales growth, profit and the like have challenges to use as measures of growth in Ethiopia, because MSEs in the country has not clear document records of their transactions. Besides that, employment number is also a measure that is easily accessible, since it is an important figure for government.

#### 2.2.2. Age of the Firm

Various researchers and writers described age of the firm is that, starting from the starting business up to the date of data collected. Therefore, measuring firm age is the magnitude between date or year of data collection and the startup time. In accordance to the effect on growth of SMEs there are two idea dimensions; **first**, age of firms has positive relationship with firms' growth, which means

when age of the firm increases growth also increases because of accumulated skills and experiences as well as it can create positive attitude on customers and clients (Storey, 1994; and Barkham et al., 1996). **Second**, age and firm's growth have negative relationship because of the strong evidence they got that young firms registered faster growth than the aged one. Evans (1987) has studied on the relationship among firm growth, age and size 100 manufacturing firms in America. He conducted the research by categorizing manufacturing firms as young (with the age of less 10 years in operation), and old (firms with the age of greater than 10 years in their operation); he found that firm growth decreased as firm age increased. This all in line with the Gibrat's Law which stated that firm growth increases with the increment on number of plants(branches), but growth decreases with the increment in age and size of the firm (Evans, 1987). SMEs firms in USA and UK show that young firms grow faster than the older firms (Storey et al., 1994). He categorized firm age as follows and studied as the dummy variable, which is therefore firms that have been waiting in operation for less than five years give 1, and if other wise 0.

R/No.	Firm Age	Years of Operation
1	Young	Less than five years
2	Medium	Between 5 and 10 years' operation
3	Old	Greater than 10 years' operation

*Table 1: age category of SMEs*

### 2.2.3. Firm Size

Firm size is usually measures through different indicators and variables, thus the most common are the number of employees during the establishment of the firm and the total capital of the organization owned. In relation to the correspondence of the firm growth and size there are in alignments among writers. As we see above in firm age and growth, there are controversies also here under the firm size. Enormous researches put different ideas on the relationship between firm size and growth; in the general pattern, smaller firms grow rapidly than their counter firms (Storey, 1994; Delmar, 1997; Kumar, 1985; and Evans, 1987). Because lower transaction costs and lesser risk, smaller firms have great advantages to grow rapidly than their larger counterpart. However, this point of view has rejected by other researchers and writers, because many writers have a research finding which is extremely different from that view. For instance; Audretsch and Klepper (2000); Sutton, (1997); and Caves (1998) stated that small firms have shorter period of survival. Westhead (1995), Phuong (2012), and Daniel (2013) also studied in England and Canada respectively and found that larger firms have more propensities for growth than their smaller counterparts do. However, on the other side of argument, the probability of a given proportionate change in size during the specific period is the same for all in the given industry regardless of their size at the beginning of the period (field, 1962).

### 2.2.4. Level of Education

In many literatures stated that the main powerful instrument in developing organizational productivity is managers' and employees' educational level and attitude. Educational qualification has different dimensions, which are very significance for micro, small and medium scale enterprises' growth. Employees who have certificate and below, diploma, and degree and above; they are lower, medium and higher level respectively. on their findings they conclude that as educational level increases, the performance of the firm and growth goes up, and the vice versa is true (Dimelis, 2013; Benzing et al., 2009; Hung et al., 2007; Benzing et al., 2005b; Chawla et al., 2010; and Yusuf, (1995). According to Yusuf (1995) firms organized and lead by educated and more skilled work force are more innovative and generate better profit and sales growth. This is a basement for firm's development. On same area of study Dimelis and Poulos et al, (2013) studied by classifying education on two main categories such as higher (diploma and above) and lower education (certificate and below) and they found that firms owned by diploma and above holders scored better growth than firms owned by certificate and below. Will and Vladimir (2001) studied on, the effect of education on MSEs' growth by grouping the respondents on four categories as primary education (grade 0-8), secondary (9-12), diploma, and degree and others, and finally found that education has no significant effect on firm growth. Both the above researchers were used the dummy variable by giving 1 for primary, 2 for secondary, 3 for diploma and 4 degree and others for otherwise, and they found that as educational level goes up, firm growth increases. Starting from the above conditions the researcher of this study used the dummy variable category for measuring whether education has effect on firm growth or not.

### 2.2.5. Access to Credit

In all types of businesses, the main constraints on firms' growth is the effect of lacking with access to debt financing (Berger et al., 1998). Mainly, micro and small firms in both developed and developing countries of the world are facing lack of access to credit. However, their degree of having an access to credit is more serious in small and medium scale enterprises in developing countries than developed ones; this is Because of these firms have no capacity to provide collateral and the lack of financial institutions in the countries. However, in the developed countries, they have better access to debt and equity financing due to access to collaterals, (Berger et al., 1998; Hall berg, 2001; Galind and Schiantarelli, 2003).

Ahiawodzi et al., (2012) conducted a research on access to credit and growth of SMEs in the Ho Municipality in Ghana. They assessed the effect of access to credit on the growth of SMEs by the measurements or variables start-up capital, annual return, current investment and the access to credit by itself to found the final result; they found that there is positive relationship between the growth of the SMEs and access to credit in Ho Municipality.

Access to credit has a great impact on firm growth. Because, initial involvement of micro, small and medium scale enterprises need initial capital; this is therefore getting from creditors in Ghana (Joseph K. et al., 2013). Researchers found that, access to credit is the critical and greatly affected growth of micro, small and medium scale enterprises in Ghana.

Dimelis and Poulos, et al. (2013) did the same study on, the effect of access to credit on growth of MSEs in the East Java by applying the OLS and discrete variable model and found that; by statistically control unobservable and other growth determinant factors of firm growth, access to credit has no appreciable effect on SMEs' growth. However, by considering and regressing all the determinant factors, access to credit have significant effect on the growth of these firms in the East Java.

### 2.2.6. Initial Capital

It is the amount of capital given to firms while they start up and join to business. Initial investment inversely related with growth in employment of MSMEs. Because, it is an injection at the start up and cannot be used solely for growth employment (Ahiawodzi et al., 2012). Initial investment has significance effect on firm growth. Financial capital on the labor intensive forms (Dimelis and Poulos, et al., 2013). Other researchers also found that initial investment has positive and significant impact on MSEs' growth in a specific business area. Which meant by, the firms started with the higher amount of initial capital are growing better, and the vice versa is true (Grant, 1991; Barney, 1991; Carroll, 1993; *Habtamu, and Aregawi, et al.2013*).

### 2.2.7. Access to Land

The concept of access to land refers to the entitlement of firms for land necessarily for the producing and selling their products. As of World Bank report (2012), Kim (2011), and Endalkachew (2008), access to land is the main constraint in many developing countries, especially in Africa. The result of those researches also stated that in Ethiopia, access to land is strongly hinders small and medium scale enterprises' growth. According to those studies, growth of MSEs is highly affected by the variable of access to land. This access to land measured by categorizing in to two phases, which are first, with those have an access and second; with those which have not.

### 2.2.8. Gender and MSEs' Growth

In developing countries, gender is the main constraint for business growth, sub-Saharan Africa (World Bank report, 2010). Various studies conducted the growth determinants of MSEs also cited that gender is among the significantly affected growth. Habtamu and Aregawi et al. (2013) and USAID (2001) put that, gender of the owner has great impact on micro and small enterprises in study area. Hence, male owned firms grow faster than their female counterparts do; this is due to social impacts on females than males. Studies done by Liedholm (2001), and Gebreyesus (2007) shows that male owned firms grow more than a double as compare to female owned firms. According to those studies, due to socio economic impacts and perception of the society on female and male, females may not return their credits, and weakly interacting with their customers and lacking with bargaining power. Finally, the researcher described as gender dummies, as if the business is owned by male has a value of 1 otherwise 0.

### 2.3. Conceptual Frame Work

The conceptual framework based on seven major independent variables that can determine the growth of MSEs in Bahir Dar city administration. It shows that the manipulation and impact of independent variables (access to credit, access to land, firm size, firm age, gender of the owner, level of education and initial capital) on dependent variable (firm growth) lead to more or less growth. According to Evans (1987a, and 1987b) growth is measured by, the change on employment number over the survey period. By understanding the above literatures, the researcher adopted the following conceptual framework from Evans (1987a), and Lori (1991) that can easily demonstrate the interaction between variables, and the effect of every independent variable on firm growth.

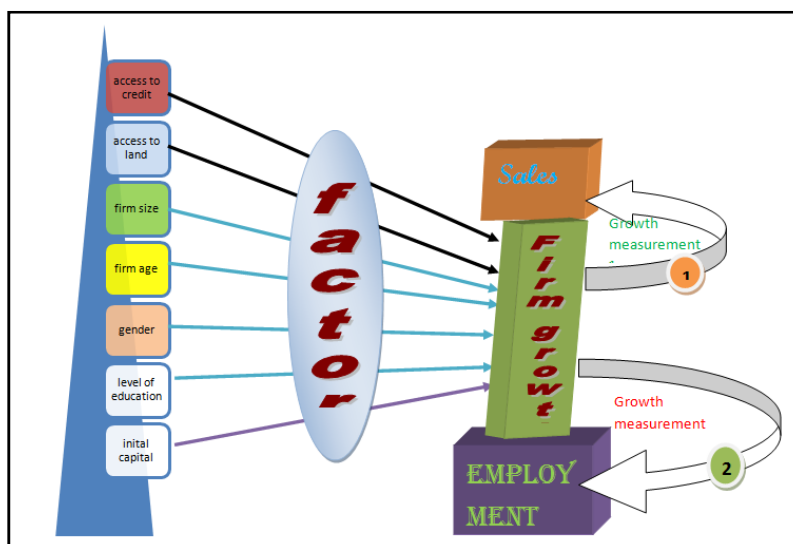


Figure 1: conceptual frameworks  
(The researcher developed)

### 3. Research Methodology

According to scientific social surveys and research (Pauline V. Young, undated) research methodology is defined as “it is way to solve systematically the research problems”, and other studies defined as the scientific way of addressing on the aim of a research work. Since, it is a systematic way it includes: research methodology, research design, research approach, target population, sampling techniques and tools of data collection, and model specification in the actual research process paper. Those research parts are the scientific mechanisms and ways to ride on and find the reliable and more accurate research outputs. The above listed are presented as follows:

#### 3.1. Research Design

Many researchers use various research knowledge claims, which are better for processing the research on answering research problems and addressing the research objectives. Since this research is pure, quantitative, post-positivism philosophical pursuit is the appropriate knowledge claim Creswell (2009). Besides that, the study used quantitative data to address the aimed objectives, and inferential approach, which help the researcher to conclude with the general population. Data has collected cross-sectional among three different business sectors (manufacturing, construction and urban agriculture) for the year of 2005 E.c. in Bahir Dar city.

#### 3.2. Research Approach

The study is numeric one; which focused on the growth of MSEs in Bahir Dar city that measured by the change in employment divided by the periods stayed in operation. The researcher used quantitative research approach in order to address at aim and the objectives of the study that already stated in the problem statement and objectives. Quantitative approach is a formalistic and structured way of collecting data and characterized by measurable data that can express in number or quantities. Generally, this is measured through statistical tools and gives the basis for the presentation of frequencies, distributions, regression analysis and correlations matrix (Limb and Dwyer, 2001; Evans, 1987a).

#### 3.3. Population and Sampling Techniques

Since this research is micro and small scale enterprises concerned, the three categories of MSEs in the city of Bahir Dar, the general population which targeted to be researched is **538(440 micro and 98 small)** MSEs are involved in the manufacturing, construction, and urban agriculture categories of the business enterprises. These enterprises registered in the administration of MSEs' office in the city since the end of 2005E.c.As far as the sampling technique is concerned, the researcher planned to use stratified random sampling system to select the appropriate sample size from the above population. The stratification needed to create homogenous groups of the target population. Based on the stratification sampling firms were grouped in to manufacturing, construction and urban agriculture within micro and small firms. After stratification done the researcher chose 103 firms proportionately from each stratum through random sampling technique, using the formula stated below. Generally, the final sample has taken from the population of 538 by calculating through the following formula at the confidence interval of 5% (Kothari, 2006).

$$N = \frac{(e * N)^2}{(100)} n = \frac{(1.96 * 538)^2}{(100)} n = \frac{(1,032)^2}{(100)} n = 103$$

- Where; n = sample size
- N = population in the study
- e = acceptable error level

Classes	Manufacturing		Construction		Urban agriculture		Micro	Small
	Micro	Small	Micro	Small	Micro	Small		
Categories	259	67	127	21	54	10	440	98
Sample distribution	57		34		12		84	19

Table 2: Populations of micro and medium scale enterprises

The sample therefore could be total of 103 MSEs in the city and proportionally 82% (84 firms) from micro and 18% (19 firms) from the small enterprises on the first stratification; whereas in the second stratum which is based on their sector of business are sampled as manufacturing 55.3%, construction 33% and urban agriculture 11.7%.

#### 3.4. Data Sources and Data Collection Tools

The research expected to have accurate and reliable data to address on the proposed research objectives and addressing the research problem. Data has collected from secondary sources.

**Secondary data sources:** data has collected from three distinct organizations. Which are 1) Bahir Dar city administration, 2) regional bureau, and 3) ACSI. Data related initial investment, number of employees; gender, firm age, and educational level of the owner have collected from Office of Micro and Small Scale Enterprises Agency of Bahir Dar city administration. Firms' accessibility for land has collected from Office of Indocination and Capacity Building of Bahir Dar, and the data for credit access of firms is collected both from ACSI and the Amhara Regional Bureau of Micro, Small and Medium Enterprises. In addition to the above sources, the research



used other secondary data sources such as financial documents, magazines, brushers, official reports and the like. This is all about the examination of documents of the enterprises.

### 3.5. Model Specification

Different researchers and authors used various models to investigate the determinants of growth of MSEs. For instance, *Ahiawodzi and Adade et al.*, (2012) used OLS statistical model with dependent variable of firm growth and regressors; such as access to credit, total current investment, age of the firm, start-up capital, education level, and annual turnover of the firm. The theoretical models are therefore the classical focusing on the learning process (active or passive), and stochastic and deterministic approaches. The stochastic and deterministic approaches are the other corners of growth theories that are usually focusing on:

**First:** the stochastic model of Gibrat's law argue that, change in size is usually due to chance; which means, age and size of the firm have no significance effect on SMEs' growth. Whereas in contrary to this argument as it cited in Anthony K. et al. (2012); and Trovato (undated) conducted research on this topic; they found that by using only both age and size of the firm, by ignoring other variables that are significantly affected the firms' growth.

**Second:** the deterministic approach came with otherwise argument to the stochastic model, that is differences in therates of growth across firms depend on asset of observable industry and firm specific characteristics *Ahiawodzi and Adade et al.*, (2012). Beside to the above arguments the researcher looks at the following research models developed by other researchers.

McPherson and Rous (2010);have conduct research on the effect of access to credit on the growth of SMEs at East Java and applied two models; which are the simple OLS and Discrete factor model. On the simple OLS model they simply considering the simple regression model by regressing all determinant factors for growth, whereas on the discrete model the researchers took in to consideration the unobservable environmental factors to get access for credit. On their first model they incorporated various variables which signify growth, such as human capital, age, size, credit and others, on the second equation credit is the function of firm age, size, human capital, others and title.

Becchetti and Trovato (2010), stated on the determinant of firm growth by employed simple OLS model and considered the effect of firm age, firm size, educational and access to finance on firm growth. The equation was set as Firm growth= f (Firm age, firm size educational level and access to finance). Their findings stipulated that access to finance, age of the firm and education have positive significance impact on firm growth, whereas firm size has no significance impact of firm growth.

Habtamu and Nigus et al. (2013) used binary logit regression model to investigate the determinant factors of MSEs' growth in the Mekelle city administration of Tigray regional state. Thus, put on their study that, two dependent and five independent variables, due to the two dependent variables they had they applied the binary logit regression model.

Finally, by considering all above models adopted and stressing on the concept that, model specification should build on the consistency of variables. Therefore, the researcher adopted the Ordinary Least Square (OLS) model which usually used by many researchers. For instance; *Ahiawodzi and Adade et al.*, (2012), and Becchetti and Trovato (2010), used OLS model as it appropriate to examine the determinants of firm growth. Researcher applied the simple OLS because of its application simplicity on variables, and popular with researchers stated above. Independent variables included in the model are: educational level, access to credit, access to land, Age of the firm, firm size, gender and initial investment, and with the dependent variable of firm growth. It adopted as follows;

$$FGR_i = \beta_0 + \beta_{1i}ACR + \beta_{2i}ACCL + \beta_{3i}FAGE + \beta_{4i}IINV + \beta_{5i}EDUCL + \beta_{6i}GNOW + \beta_{7i}FSIZE + \epsilon_i$$

Where: FGR = Firms Growth

1. ACR = Access to Credit
2. ACCL= Access to land
3. FAGE = Age of the Firm
4. IINV = Initial investment
5. EDUCL= Educational Level
6. GNOW = gender of the owner
7. FSIZE= Firm size
8. e = The error term
9. i = 1, 2, 3.... n, where n is the number of firms

B's = are multiple regression coefficients estimated.

### 3.6. Operational Definition of Variables

Firm growth is the dependent variable under this study which therefore affected by various variables. Independent variables which affect SMEs' growth tested as of stated in the literature review above. These variables are mainly regress growth. These variables and their measurement were measure in the research as follows:

R/N	Notations	Variables	Operational definitions
1	FGR	Firm growth rate	Firm growth measured through employment growth between the years of beginning and sampling periods divided by age of the firm.
2	ACR	Access to credit	It measured by separating in to two phases; having access and have no access (give 1 for those have access and 0 otherwise)
3	ACCL	Access to land	Access to land measured by the dummy; by giving 1 for those having access and 0 otherwise
4	FAGE	Firm age	The years between starting operation and the sampling period
5	FSIZE	Firm size	It measured in terms of number of employees at time of survey by putting them as firm dummies. Micro as 1, otherwise 0
6	IINV	Initial capital	Initial capital measured by financial capital at the time of starting business.
7	GNOW	Gender of the owner	This is measured by dummy of male owned by 1, and other wise 0
8	EDUCL	Educational level	Measured by the dummy variable; giving 1 for primary, 2 for secondary, 3 for diploma and 4 for degree and others; giving 1 for fulfilling 0 otherwise.

Table 3: Operational definition of variables

#### 4. Data Analysis, Results and Discussions

This chapter presents the finding and discussion of the study in achieving the objectives aimed to address based on the methodology discussed in chapter three above. After data collection process is completed, the researcher conducted; coding, labeling and the like performed. To analyze and examine the data both as descriptive and regression statistics are used, the researcher applied Statistical Package for Social Sciences (SPSS) project **version-20** to process statistical tasks. This chapter has two parts. **Part-I** is focused on an exploring the data and making descriptive analysis about the dependent variable firm growth and explanatory continuous variables, and their relationships. Practically, on this descriptive part, the researcher emphasizes on showing the growth and firm age, firm size nexus applying simple statistical tools (mean, standard deviation, maximum and minimum), and graphs across firms. When we calculate this analysis, we believe that as it very critical and important starting point for adopted econometric methods. The second part of the chapter is about the econometric results, which therefore obtained through empirical models specified in chapter three. Since this is the last part of the chapter, it thoroughly analyzes of different model tests and the regression analysis. To leap for the next two basic analysis parts, the profile of sample distribution should stipulate in a table as follows;

##### 4.1. Demographic Characteristics and Descriptive Statistics

In this part of the chapter, the researcher makes demographic clarifications on gender of the owners, age of the firm, educational level, size of the firm and sector of business. In addition to the demographic characteristics, the cross-sectional relationship among firms also described through descriptive statistics and correlation coefficients. This is stipulated the continuous variables which can determine the growth of MSEs in Bahir Dar city administration. Before cross-sectional descriptive analysis is made, we calculated the proxy of variables like firm growth rate by the formula stated as growth if the change in number of employees over their operational periods in chapter three.

##### 4.1.1. Gender of the Owner

		Mean growth	Standard Deviation	Frequency	Percent	Minimum growth	Maximum growth
Valid	Female	1.4595	0.67560	49	47.6	0.00	3.20
	Male	1.4929	0.65505	54	52.4	0.00	3.41
	<b>Total</b>	<b>1.4770</b>	<b>0.66184</b>	<b>103</b>	<b>100.0</b>	<b>0.00</b>	<b>3.41</b>

Table 4: gender of the owner  
Source: data analysis for the study

From the Table 4 we look for the trend of owners, whether the organization owned by female or male. In Table 4, 54 MSEs or 52.4 percent owned by male owners and the rest 49 firm of 103 samples or 47.6 percent owned by their female counter parts. This is not popular in different studies; for instance, Tadele (2012) studied in Adama city administration on MSEs, and he found that; female owns majority of the firms included in the sample and rest smaller in number firms owned by their male counter parts. In the city administration, majority of firms incorporated in the research owned by male owners. Although such result gotten, the position or proportion is almost similar between female and male demographic distribution. Another issue incorporated in Table 4, growth rate of firms among the male and female owned; the result showed that female owned firms grow with mean growth rate of 1.4595,

(SD=0.68), whereas firms owned by male grow by 1.4929, (SD=0.66); the result tells us, firms owned by female as equal as firm growth owned by male counter parts. Because, the growth rate between those owners is almost the same. This result is uncommon in previous many researches.

#### 4.1.2. Educational level of the owners

		Mean Growth	Standard Deviation	Frequency	Percent	Minimum Growth	Maximum Growth
Valid	Primary	1.2877	0.60141	36	35.0	0.00	3.41
	Secondary	1.3494	0.57884	39	37.9	0.00	2.79
	Diploma	1.7506	0.58146	20	19.4	1.40	2.84
	degree and others	2.2671	0.79720	8	7.8	0.92	3.20
	Total	1.4770	0.66184	103	100.0	0.00	3.41

Table 5: educational level

Source: data analysis for the study

Table 5 shows that distribution of level of education of owners, have grouped under four levels;

1. 35 percent of the total sample are managed by primary education,
2. 37.9 percent of the firms are owned by secondary education levels,
3. 19.4 percent of the sampled are owned by diploma certified and the rest 8 firms are owned by degree holders and other trainings which are related to their business sector, which is generally consists of 7.8 percent of the total sample included in research.

Generally, we can conclude that majority of the firms owned by primary and secondary level educated managers. To look at the growth trend and educational level from Table 5 above; primary level educated owners scored mean growth of 1.29(SD=0.60), secondary level 1.35(SD=0.58) diploma 1.75(SD=0.58) and degree and others grow by 2.27(SD=0.80). Firms owned both by primary and secondary educated are grow on average of 1.32, whereas firms owned by diploma and degree holders grow on average of 2.01.

#### 4.1.3. Age of the Firm

Age	Frequency	Percent	Mean Growth	Standard deviation	Minimum growth	Maximum growth	
Valid	1	20	19.4	1.0471	.61834	.00	1.79
	2	30	29.1	1.2684	.48091	.35	2.71
	3	19	18.4	1.5811	.60367	.46	3.03
	4	16	15.5	1.6498	.57355	1.10	2.77
	5	6	5.8	1.7835	.52225	1.39	2.79
	6	4	3.9	2.2226	.61107	1.39	2.84
	7	2	1.9	2.4055	1.12586	1.61	3.20
	8	3	2.9	1.4318	.15983	1.30	1.61
	11	1	1.0	2.5392	.	2.54	2.54
	12	1	1.0	2.0479	.	2.05	2.05
	35	1	1.0	3.4145	.	3.41	3.41
	Total	103	100.0	1.4770	.66184	.00	3.41

Table 6: age of the firm

Source: data analysis for the study

The diagram tells most micro and small business firms in Bahir Dar become highly active few years ago. The growth trend shows that, firm growth rate increases with increasing firm age. This is similar with research findings found by other researchers before (Evans, 1987a).

#### 4.1.4. Sector of the Business

	Business sectors	Frequency	Percent	Mean growth	Standard devotion	Maximum Growth	Minimum growth
Valid	Manufacturing	57	55.3	1.4611	.63319	3.41	0.00
	Construction	34	33.0	1.4616	.67076	2.84	0.00
	urban agriculture	12	11.7	1.5962	.80834	3.20	0.35
	Total	103	100.0	1.4770	.66184	3.41	0.00

Table 7: sample distribution based on business sector

Source: data analysis for the study

Regarding of the sector demography of the firms which are included in the research is categorized in to three main classes; 34 firms (33 percent) are construction, 57 (53.3 percent) are manufacturing and 12 (11.7 percent) are urban agriculture. According to the figure in Table 7 since sample proportionally chosen from each strata of the population, majority of the firms in the city are manufacturing among the sampled. Furthermore, the researcher also stated and compared growth rate among those sectors. As it stated in Table 7, manufacturing business has a minimum of 0 and maximum of 3.41 and average growth of 1.4611(SD=0.63) construction scored 0 minimum and 2.84 maximum with the average growth of 1.4616(SD=0.67); and the urban agriculture registered minimum growth of 0.35, maximum growth of 3.2 and average growth of 1.56(SD=0.81). By looking at those values, we can analyze that both the manufacturing and construction sectors have same growth rate, because their values are almost similar. Nevertheless, the third sector of business that is urban agriculture scored better growth than the other two sectors (manufacturing and construction). This is because both manufacturing and construction grow by 1.46, whereas urban agriculture grows by 1.56; which is more than 0.10. Therefore, the researcher concludes that, urban agriculture has better growth than the other two counter parts.

#### 4.1.5. Size of the Firm

		Frequency	Percent	Mean Growth	Standard deviation	Minimum growth	Maximum growth
Valid	Micro	75	72.8	1.1926	.41507	0.00	1.61
	Small	28	27.2	2.2387	.59694	0.69	3.41
	Total	103	100.0	1.4770	.66184	0.00	3.41

Table 8: size of the firm  
Source: data analysis for the study

According to Table 8 describes the proportional incorporation of firms from both micro firms with total number of employees between 1 and 5, and small firms with employee's number of greater than 5 but not more than 50. What we observe from the figures in the table is therefore, that 75(72.8 percent) from the sample are micro firm and the rest 28 (27.2 percent) are small firms. Regarding to their growth micro enterprises have scored an average growth rate of 1.19(SD=0.42), minimum growth rate of 0.00 and maximum growth rate of 1.61, whereas their small counter parts scored an average growth rate of 2.24(SD=0.60), minimum growth of 0.69 and maximum growth rate of 3.41. From those results, small firms grow better than micro firms in the city administration do. Because, small firms have better opportunity to get resources and market access than their micro counter parts. Thus, small firms may fulfill some borrowing requirements offered by financial institutions; like collaterals.

#### 4.1.6. Access to Credit

		Frequency	Percent	Mean growth	Standard deviation	Minimum growth	Maximum growth
Valid	No	53	51.5	1.3309	0.71044	0.00	3.41
	Yes	50	48.5	1.6319	0.57329	0.35	2.84
	Total	103	100.0	1.4770	0.66184	0.00	3.41

Table 9: distributions based on access to credit  
Source: data analysis for the study

Table 9 stated that the distribution of sample in the study based on the accessibility to credit finance, the figure normally shows 50 firms or 48.5 percent were sampled from credit accessible for one times or more, whereas the rest 53 firms or 51.5 percent were sampled from those who have not credit access. The distribution of the sample is almost similar. In parallel with their distribution, the researcher examined growth relationship between accessible and inaccessible firms. Withstanding those issues inaccessible firms scored a mean growth rate of 1.33(SD=0.71), minimum growth of 0.00 and maximum growth of 3.41; however, the accessible firms have registered a mean growth rate of 1.63(SD=0.57), minimum growth of 0.35 and maximum growth rate of 2.84. From the above results, we can understand that credit accessible firms have better growth than those, which do not.

#### 4.1.7. Access to Land

		Frequency	Percent	Mean growth	Standard deviation	Minimum growth	Maximum growth
Valid	No	42	40.8	1.3881	0.57153	0.00	2.77
	Yes	61	59.2	1.5382	0.71563	0.00	3.41
	Total	103	100.0	1.4770	0.66184	0.00	3.41

Table 10: distribution of firm's access to land  
Source: data analysis for the study

The demographic distributions in the table above describes 42 (40.8 percent) of the total sample included in the study are selected from those have no access of land that helps them to produce and sell their products in stable and less costly environment. The rest 61 (59.2 percent) are chosen from the firms which already have access to land for production and selling their products. As we can

observe from the Table 10, firms which have an access to premises scored a mean growth rate of 1.54(SD=0.72) with minimum of 0.00 and maximum growth of 3.41, whereas the inaccessible firms registered a mean growth rate of 1.39(SD=0.57) with minimum growth of 0.00 and maximum growth of 2.77. These results examined that both accessible and inaccessible firms scored the same growth rate within the study area.

#### 4.1.8. Correlation Analysis among Variables

Correlation statistics in many studies usually used to examine the relations between two variables, to show the magnitude and variation between. A correlation analysis was conducted to determine those relationships between the variables using Pearson-product moment correlation coefficient at the significance level of  $p < 0.01$  and  $p < 0.05$ . This study also included the statistical descriptive in order to evaluate the effect of the continuous on the dependent variable firm growth in our concern. This analysis tremendously signifies to which sector type of business the variables have greater impact by comparing with the other sector of businesses.

##### 4.1.8.1. Correlation Matrix (Pearson Correlation)

This study used the correlation that investigates the strength of relationship between the studied variables. According to (Hair et al., 2007) to measure the linear association between two metric variables, correlation calculated in two stages as a measure of relationship between dependent and independent variables. This examination gives both directions; which are positive and negative. Which means, correlation of two or more variables lay between -1 and 1; -1 states that perfect negative correlation that means there is no relationship between variables, 0 correlation shows there is no relationship between or among variables, and variables with correlation values of 1 describes their perfect correlation or have strong relationship in between or among variables.

According to Evans (1987), and Pallant (2010) stated in the study as the negative correlation value closer to 0, the relationship among variables even if their relationship is inverse it goes to none relations, and the positive values closer to 0 also describes although they have positive relationships, it is weaker when it approaches to 0 correlation. Pallant (2010) set a range for the rest of correlation coefficients' strength; which is therefore, small correlation for the value of 0.01 to 0.29; medium correlation 0.3 to 0.49; and large (strong correlation) for 0.50 to 1.00. This entire basis was included in to the correlation analysis. The study variables positively correlated with firm growth except primary and secondary education. Although variables positively correlated, some variables correlation is weaker than some other variables. Dependent variables have correlation coefficient value of 0.01 to 0.29; both they have weak positive correlation, since the correlation result of diploma ( $r = 0.204^*$ ,  $p < 0.05$ ), degree and others ( $r = 0.284^*$ ,  $p < 0.05$ ), and access to credit ( $r = 0.228^*$ ,  $p < 0.05$ ) have  $r$  value laid between this interval they have weak but positive correlation with firm growth in our case. The independent variables initial investment ( $r = 0.378^{**}$ ,  $p < 0.01$ ) and firm age ( $r = 0.477^{**}$ ,  $p < 0.01$ ) are moderately correlated with growth of MSEs, and size of the firm ( $r = 0.707^{**}$ ,  $p < 0.01$ ) is strongly correlated with firm growth(Pallant, 2010). However, primary education negatively correlated with the firm growth, which means that primary education has relationship with firm growth in our case. Generally, most of the variables included in the study model positively correlated with dependent variables; thus, we can conclude that most of the variables are the true regressors of firm growth in our study. Farther more, the study disseminated that; correlation matrix is significance variables in the regression analysis. Therefore, FSIZE and IINV positively correlated at 35%.FSIZE and EDUCL4 are correlated with moderate correlation level with 23%;ACR and IINV are positively correlated with 17%; FSIZE and EDUCL3 positively correlated with 14%, FAGE and FSIZE are positively correlated at moderate level of 30%, the rest variables are negatively correlated but all the correlation matrix are valued lower than 70%, this generally tells regressors have no strong correlation with each other. It described that multi-co linearity and auto-correlation are not a problem for the study.

#### 4.2. Testing Assumptions of the OLS and Model Fitness

Before regression analysis takes place, the study considered various assumptions, which can affect the reliability of the model employed (OLS).In the practical world, multiple regression models subjected to enormous important assumptions of the ordinary least square model (OLS). Of course, in various researches, model fitness examined through testing of normality of residuals, multicollinearity, heteroscedasticity and auto-correlation of the model. Accordingly, that assumption has tested under this research study.

##### 4.2.1. Normality Test

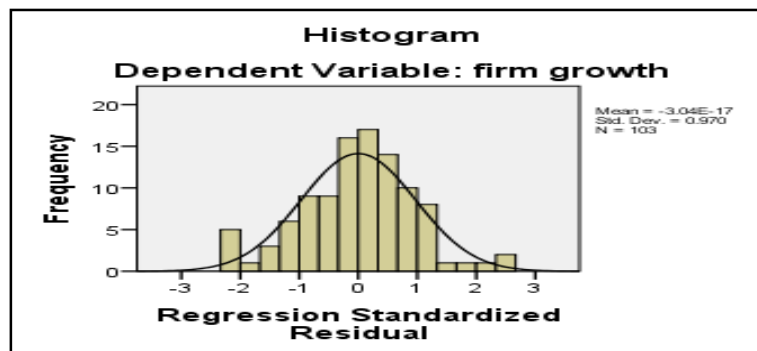


Figure 2: graph of normality

According to Tadele (2012), and Field (2009) normality is the testing about the normal distribution of residuals in the model, in the studied research. Both the researchers used residuals histogram and the normal probability plot, the Shapiro Wilk test for the better clarity. According to Field (2009), residuals should within the normal distribution curve; the residuals here under the study are laid between -3 and +3. This stipulated that residuals have normally distributed. Researcher of the study also employed normal probability plot to prove the normality distribution stated in histogram is real or not. As it putted in the figure 3, P-P plot is therefore, satisfied the rule of normally distribution; because, almost all of the residuals have laid on the diagonal line. Furthermore, the Shapiro Wilk test put the HO: residuals have normally distributed; if the  $p > 0.05$  level of significance.

	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
firm growth	.178	103	.096	.955	103	.142

Table 11: Shapiro Wilk test of Normality  
Source: data for the study

The result in the table above shows the sig value under the study is 0.142 or 14% which is greater than 5%, and even 10% level of significance. Thus, accept the null (residuals are normally distributed); therefore, the study has no normality problem through all tests.

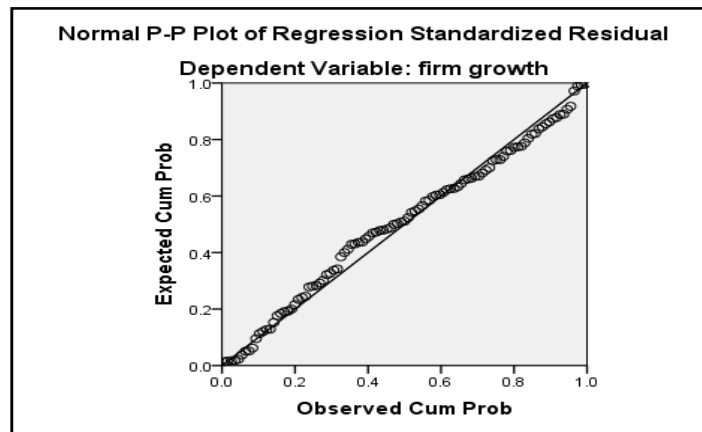


Figure 3: graph of normality /P-P plot/

**4.2.2. Auto-Correlation test**

As in various studies set auto-correlation tested by using Durbin-Watson. Durbin-Watson can vary between zero and four; these values have their own descriptions as follows. Durbin-Watson value is two, then the residuals are uncorrelated, value greater than two describes that there is negative correlation between adjacent residuals, if the value is below two, which means there is positive correlation. In the rule-of-thumb, values less than one and greater than 3 are a great concern with autocorrelation, whereas the value closer to 2 is not that much our concern(Field, 2009). In consistence to this rule, since the result of Durbin-Watson is 1.934 (fig: 4.8 below) and fall in the acceptance region or range; therefore, autocorrelation is not alarmed in this study.

**4.2.3. Multi-Co linearity test**

Multi-Co linearity measured through the level of tolerance and the variance inflation factor (VIF) Tadele (2012), and Field (2009). According to Field (2009) and Lawrencia et al. (2012), the level of tolerance is usually 50% and above which is the acceptable standard, and VIF took value lower than two shows that there is no multi-Co linearity problem in the model. Since, the level of tolerance for the study haslain from 72% up to 94% and VIF haslain from 1.07-1.39; in addition to Field and Tadele, N. Gujarati (2009), put some issues about multi-co linearity. According to him if variance inflation factor of a variable exceeds 10 and R<sup>2</sup>exceeds 90%, it usually shows there is high multi-co linearity problem; and the closer to zero the tolerance. The study variables have VIF of less than 10 and R<sup>2</sup> less than 90% (68%), and TOL of closer to one. Since the model has satisfied both variance inflation factor and level of tolerance, it has no multi-Co linearity problem; therefore, the adopted model is fitted model.

Model	Independent variables	Standardized Coefficients		Co linearity Statistics	
		Beta		Tolerance	VIF
	firm size in micro or small	.73		.721	1.386
	firm age in year	.06		.893	1.120
	access to credit	.25		.937	1.067
	degree and others	.45		.874	1.144
	Diploma	.22		.934	1.071
	initial investment	.29		.848	1.179

Table 12: multicollinearity test result  
Source: multicollinearity analysis for the study

#### 4.2.4. Heteroscedasticity Test

Since the model is OLS it usually subjected to heteroscedasticity problem, to prove whether the model has different variance or unit variance, the researcher conducted various assumption tests. For the moment, Breusch-Pagan / Cook-Weisberg and White's test have conducted to prove the hypothesis. Breusch-Pagan test of heteroscedasticity considered the greater p value. The p value therefore for the study is 0.26 (26%) which is higher than the level of significance 1%, 5%, and/ 10%. Whereas White's test for heteroscedasticity considered that, if the chi square calculated should greater than the chi square tabulated, there is heteroscedasticity problem Gujarati (2004). However, in our case here under the study chi square calculated (42%) is lesser than chi square tabulated (45%). Although those results showed as there is no heteroscedasticity problem, for the better assuring of constant variance across samples the researcher also used cluster robust standard error to handle errors. Generally, by looking at those results the researcher concluded that, there is no heteroscedasticity problem in the study.

#### 4.2.5. Model Specification Test

In addition to the above tests the classical linear regression model subjected to other assumptions, it is mainly tests whether the model appropriately and correctly specified errors which means errors in the model are fairly distributed. The test is help full to justify the inclusion of irrelevant and exclusion of relevant variables which leads to formulate wrong model or equation, and errors in measurement of proxy variables that violate the CLRM assumptions. To examine whether such problem is existing in the study formula or not the researcher employed the Ramsey's Regression Specification Error Test (RESET). Ramsey test describes that nonlinearity test of residuals which have strong dependency between explanatory variables or not. It also confirms the null hypothesis ( $H_0$ : model has no omitted variables) is accepted as the p value is larger than 5%, which statistically insignificance. The result tested through RESET under this study is 0.6302 or 63%, which is really greater than 5%, which stated that model of the study has no omitted variable. Furthermore, the regression result also shows, p value of the overall model is 0.0000 and reasonable  $R^2$  about 68%. Since, all those issues are satisfied the model is fitted model and specified well.

#### 4.3. Regression Analysis

The study aims to investigate how well the variables included in the study do predict growth of MSEs specifically, manufacturing, construction and urban agriculture, and which of the variables is the best predictor of growth; Variables are formulated as multiple regressions. To analyze the conceptual framework enormous independent variables were included in to the multiple regression equation. This section come-up with results of the variable and their effect on the dependent variable. According to Hair et al. (2007), Multiple Regression Analysis, is a form of general linear modeling, is an appropriate statistical technique when examining the relationship between a single dependent (criterion) variable and several independent (predictor) variables. These writers explained that ideas of using multiple regression analysis are to use the independent variable whose values are to predict the single dependent value selected by the researcher. In this study the researcher used cluster robust regression/robust regression multiple regression analysis were conducted in order to examine the relationship between growth of MSEs firms in the city and other independent variables such as initial investment, firm age, firm size, educational level of owners, gender of the owner, access to credit finance and access to land for production;

FGR	Coef.	Robust Std. Err	t	P> t	[95% Conf. Interval]	
GNOW	0.1077068	0.0365114	-1.95	0133	-.1792678	-0.0361458
ACR	0.2549013	0.0974359	2.62	0.009	0.0639304	0.4458721
ACCL	0.1446721	0.1040926	1.39	0.165	-.0593457	0.3486899
IINV	2.92e-06	1.41e-06	2.07	0.038	1.60e-07	5.67e-06
FAGE	0.0551623	0.0139798	3.95	0.000	0.0277624	0.0825622
FSIZE1	0.7257242	0.0922018	7.87	0.000	0.545012	0.9064363
EDUCL2	0.0923989	0.1332338	-0.69	0.488	-0.3535324	0.1687346
EDUCL3	0.2172699	0.0605674	3.59	0.000	0.0985599	0.3359798
EDUCL4	0.4466604	0.280067	4.09	0.011	-0.1022609	0.9955817
_CONS	0.8443695	0.0710144	11.89	0.000	0.7051838	0.9835553
Number of obs =103 F (9,93) =18.86 Prob > F=0.0000 R-squared=0.6864 Root MSE=.38814						

Table 13: Model summary of Robust Regress results  
(Std. Err. adjusted for three clusters in bus)  
Source: from regression analysis for the study

The model above presents how much of the variance in the measure of growth has explained by the model. According to  $R^2 = 0.6864$  that described about 69% of the variances are explained by the explanatory variables, and the remaining 31% of the variance is

explained by variables which are not included in the model. Generally, the model adopted in this study is cumulatively significance, because the level of significance 0.0000 is less than 5%, therefore, our model is statistically significance and fitted model.

In addition to the  $R^2$  stated above, the coefficient of every variable in the model has interpreted. Based on Table 12 the following interpretations are settled; when firm size increased on average by 1.00, firm growth increases by about 0.73 units while other variables remains constant; when age of the firm on average increases by one year, firm growth increases by 0.06 units, other variables remaining the same. When number of degree and others holders increase averagely by 1.00, firm growth increases on average by 0.45 unit, while other variables constant. If number of firms owned by diploma holder increase by one unit, firm growth increases by 0.22 units while other variables remained constant. When number of firms owned by secondary school completed increases by one unit, firm growth increases by 0.09 units, other variables remained the same. If number of firms accessible to credit finance increases by one, firm growth increases by 0.25 units, other variables constant. Finally, if amount of initial investment averagely increases by birr 1, firm growth increases by 0.29 units.

#### 4.4. Hypotheses Test

Proposed hypothesis tested based on the results of the multiple regression analysis. By looking at the Sig.-value in Table 14, it is possible to interpret whether the particular independent variable has a significant relationship with the dependent variables. Two approaches can be used to test the significance level: either by comparing t-value and the rule-of-thumb oft, if the value of t under large sample (usually greater than 30) greater than 2 the model is fitted, or by comparing Sig. The rules of thumb for this for this study if Sig.  $< \alpha = .05$ ,  $H_0$  rejected, and conversely, if Sig.  $> \alpha = .05$ ,  $H_0$  was not reject. Hypothesis is supported when the Sig. value is smaller than 0.05; and a null hypothesis is rejected when the p value is equal or larger than 0.05 (Pallant, 2010). Beta coefficients used to evaluate the direction of each linear relationship (i.e. negative or positive). Therefore, interpretation of the t-statistics and beta estimates proceeded for each hypothesis.

DEP.V	Independent variables	Beta	T	Sig.
Firm growth	(Constant)		11.89	.000
	firm size	0.73	7.87	.000
	firm age in year	0.06	3.95	.000
	access to credit	0.25	2.62	.009
	degree and others	0.45	4.09	.0011
	Diploma	0.22	3.59	.0000
	initial investment	0.29	2.07	.038

Table 14: significance estimation

- $H_1$ : Access to credit has no significance effect on the growth of micro and small-scale enterprises in Bahir Dar city
- $H_0$ : access to credit has no effect;  $r = 0$
- $H_1$ : access to credit has significance effect on growth;  $r \neq 0$ .

The overall regression model indicated that a significant estimate ( $t=2.62$ ,  $p=0.009$ ) in Table 14. The corresponding beta coefficient indicated a positive effect ( $\beta=0.25$ ). Since, and p value is greater than 5%, we reject the null, which means that, we accept the alternative hypothesis. Therefore, the result stated that, access to credit has significance effect on firm growth of MSEs in the city. Because of  $\beta = 0.25$ , there is positive effect; by comparing the firms have access and no access to credit finance, firms those who have access to credit finance have better growth; as if credit increases by 1 unit growth of accessible firms growing by 0.25 units, while other variables remaining the same. This is in line with the previous research results found by Ahiawodzi et al., (2012); Joseph et al., (2013) conducted in Ghana and Dimelis and Poulos et al (2013) in East Java, all those researchers got the same result, which shows access to credit has positive effect on firm growth, although they applied different variables and models. On this study also found the same position of access to credit and firm growth come-up with the conclusion, access to credit has positive effect on MSEs' growth despite of their survey time.

- $H_2$ : There is no significant relationship between the age of the firm and their growth; firm growth decreases with firm age
- $H_0$ : firm age has not significance relationship with growth;  $r = 0$
- $H_1$ : has significance relationship between age and firm growth;  $r \neq 0$ .

In regression of Table 14 above indicates, the model estimated and got the results of ( $t=3.95$ ,  $p=0.000$  and  $\beta=0.06$ ). P-value tells that there is positive and significance between age of the firm and growth. When we look at the value of significance (p-value) is greater than the rule-of-thumb of p, therefore we reject the null, and accept the alternative hypothesis. There is positive relationship between age of the firm and growth of the firm, which is therefore that as the age of the firm increases by one year, growth of firms increases by 0.06 units, while other variable is remaining constant. This result is in contrary to Gibrat's Law; and however it supported the findings got by Storey, (1994); Barkham et al., (1996). Their findings were in opposite to the above rules, which was therefore as age and growth of MSEs firms have positive relationship, which indicates, if age increases growth also increases. The result of this research is also in line with these findings.

- $H_3$ : There is no significant relationship between the size of the firm and the level of growth attained; firm growth increases with firm size.
- $H_0$ : there is no significance relationship between firm size and firm growth;  $r = 0$



→ H1: firm growth increases with firm size;  $r \neq 0$

As it shown in Table 14 above a significant estimate ( $t = 7.87$ ,  $p = 0.000$ , and  $\beta = 0.73$ ) starting from the beta coefficient it realized that there is positive relationship between size and firm growth and statistically significant. To come-up with decision, since they have positive relationship the researcher reject the null and accept the alternative hypothesis, which means that there are significance positive relations between them. Thus, as MSEs' size increase by one employee, firm growth increases by 0.73 units, while others remaining constant. As we have seen in the descriptive analysis small firms has better growth than micro firms do; although both micro and small firms have the tendency of growing. As we have seen in the literature part of the research, there are different debates towards size of the form and their growth. The most prominent ideas are; Evans (1987); Kumar (1985) and Delmar (1997) who advocates there is negative relationship between firm size and firm growth; the proponent of this idea Audretsch and Klepper (2000), Sutton (1997), and Caves (1998) contend that, there is positive relationship between firm size and firm growth. Which means that, as the size of the firm increases, growth also increases. This finding is similar with the second argument that advocates, there is positive relationship between firm growth and size.

Model	Beta	T	Sig.	Collinearity Statistics		
				Tolerance	VIF	
6	gender of the owner	0.11	-1.95	.133	.984	1.016
	access to land	0.14	1.39	.165	.920	1.087

Table 15: significance estimate for excluded variables

Source: from appendix 5 data analysis for the study

➤ H4: There is no significant relationship between the access to land and firm growth

→ Ho: there is no significance relationship between access to land firm growth;  $r = 0$

→ H1: there is significance relationship between access to land and firm growth;  $r \neq 0$

The significance analysis in Table 15 stated results of ( $t = 1.95$ ,  $p = 0.133$ , and  $\beta = 0.055$ ), before we describe their correlation and relationship, it is necessary to look at the level of significance of the independent variable access to land; the result therefore shows that access to land has 36% p-value, which is greater than the rule-of-thumb of 5%. Therefore, the researcher failed to reject the null hypothesis. Thus, access to land has no significance effect on growth of MSEs in the city. Which means, firm growth those who have an access to land for production and selling for their products is as equal as growth of firms those who have not. The result found in this research is differ from the previous studies and World Bank report (2012), which was therefore, as access to land increases, firm growth also increases; that inculcates accessible firms have better growth than non accessible firms. However, in this study both accessible and non-accessible firms scored almost the same growth rate.

➤ H5: There is no significant relationship between initial investment and the level of growth attained.

→ Ho: no significance relationship between amount of initial investment and firm growth;  $r = 0$

→ H1: there is significance relationship between investment amount and growth; as investment amount increases, growth of MSEs' increases;  $r \neq 0$

In the literature part of this study described that initial investment and firm growth have positive relationship. For instance, Ahiawodzi et al. (2012); Dimelis and Poulos, et al., (2013); Grant, (1991); Barney, (1991); Carroll, (1993); Habtamu, and Aregawi, et al. (2013) found that, initial investment has positive effect on firm growth. On the significance estimates Table 12 above results of ( $t = 2.07$ ,  $\beta = 0.29$ , and  $p = 0.038$ ), both estimates are statistically significant; because the calculated t is greater than 2 and p value also greater than 5%. Therefore, initial investment and firm growth have positive relationship. As initial investment increases by 1 ETB, MSEs' growth increases by 0.29 units; keeping other variables constant.

➤ H6: there is no relationship between increasing in educational level and firm growth.

→ Ho: level of education and growth have no relationship;  $r = 0$

→ H1: level of education and growth have significance positive relationship;  $r \neq 0$

According to the multiple regressions analyzing by considering their p-value, educational level is significantly affected firm growth and have positive relationship. The result therefore interpreted in terms of their primary education. Generally, the finding showed that as education level of firm owners goes-up growth of the firm also goes up. Which are therefore, positively correlated education with firm growth of MSEs in the study. The result is in line with the various studies conducted by researchers before. Dimelis, (2013); Benzing et al. (2009); Hung et al., (2007); Benzing et al., (2005b); Chawla et al., (2010); and Yusuf, (1995) contend that, as educational level increases from primary to secondary and other next educational levels, firm growth also increases; mainly managers who are diploma and degree holders have better capacity to innovate and to be productive. The same result found in this study also.

➤ H7: there is no relationship between gender and firm growth.

→ Ho: gender of the owner and growth have no relationship;  $r = 0$

→ H1: gender of the owner and growth have significance positive relationship;  $r \neq 0$

The significance analysis in Table 15 stated that, results of ( $t = 1.95$ ,  $p = 0.133$ , and  $\beta = -0.11$ ), before we describe their correlation and relationship. It is necessary to look at the level of significance of the independent variable gender of the owner; the result therefore shows that gender has p-value of 13%, which is greater than 5%, the rule-of-thumb, furthermore, the t-value (1.95) is also below t tabulated (2). Therefore, the researcher failed to reject the null hypothesis; gender has no significance effect on growth of MSEs in the city. Which means that, firms owned by female equally grow with, firms owned by male. The result differs from the previous studies'

findings. For instance, Habtamu and Aregawi et al, (2013), USAID (2001), Liedholm (2001), and Gebreyesus (2007) found that gender of the owner has significance impact on firm growth; particularly, firms owned by male are registered a double growth, when they compare with firms owned by female. However, in this study, gender has no significance effect on firm growth, because firms owned both by female and male have same growth rate. The finding shows that, the social and family effect on female is dramatically changing in Bahir Dar city administration.

## 5. Summary, Conclusion and Recommendation

This paper examined the determinant factors of micro and small firms in Bahir Dar city administration, by collecting secondary data from MSEs' Agency of Amhara regional bureau, ACSI and the office of MSEs for Bahir Dar city for the year of 2005. The study used both descriptive and inferential statistical analysis under the Statistical Package for Social Sciences version 20 (SPSS-20). The chapter particularly concludes, the main findings and recommendations based on the objectives and hypothesis set under chapter one. Those summaries are firstly set in a separated way, and then at the end of the statements it generalized the general implication of the entire study. In addition to the conclusion, the chapter also included the recommendation part of the research. As of those aims and targeted objectives, the following conclusions stated accordingly.

### 5.1. Summary

The first objective of the study was to investigate access to credit with relation to MSEs' growth in the study area. The findings from descriptive statistics and regression analysis therefore show that, access to credit has positive relation with firm growth of MSEs; and firms which have access to credit financing have better growth than those which do not. In the study, small manufacturing firms have better access to credit than other firm types, because the government gives more emphasis for them. Due to the reason, manufacturing firms registered better growth than other firms did. However, the rest firm types like construction and urban agriculture could not equally compete in the MSEs' industry in the city.

As we stated in literature part of the study, there are enormous arguments towards firm age and firm growth. By considering those controversies researcher of the study analyzed the data properly and arrived at condensed outcomes. Both descriptive and regression analysis results in this study show that age of the firm has positive effect on firm growth in our cases, and aged firms scored better growth than young firms. The researcher therefore concludes that age and firm growth have positive relationship; which means, as age of individual firm increases firm growth also increases and usually have positive relationship.

In addition, with the above objectives, the research has expected to prove whether firm size has an impact of firm growth or not. All hypothetical cases have tested critically. As we have seen in age and growth relationship above, there are arguments under the size and growth of firms also. Arguments under these ideas have grouped in to two dimensions. The first dimension was, small firm grow better than their large counter parts; and the second dimension was, large firm grow better than their smaller counter parts. They reason out that, due to depository experiences and skill larger firms have better growth than smaller counter parts. By looking on the above arguments, the researcher conducted stepwise and critical analysis to prove the set objective. Thus, both through descriptive and regression analysis, the study found two basic results. First, size and firm growth have positive relationship, and second, larger firms have better growth possibility. From those results, the researcher concludes that as the size of firm increases, growth rate of the firm also increases. Although firm size has significant effect on firm growth, due to better access to land, credit and lower transaction costs small firms grow better than their micro counter parts.

Besides, to the above objectives, the research study assessed other determinant factors of firm growth. As many researchers, access to land was expected among the determinants and analyzed based on the research data. From my observation and various studies on MSEs, access to land is the prominent factor in expanding the production capacity of MSEs. Nevertheless, in our research findings mainly in the descriptive analysis shows both accessible and inaccessible firms grow in the same proportion, although it has small differences but not significant. From observations and regression, results micro and small firms have problems on handling land access; due to such gaps, the land access may not create difference on firm growth in the city.

The fifth objective of the study was investigating does initial investment has an effect on firm growth. At the end of the study, the research analyzed the result in relation with other researchers' findings. Many researchers found that initial investment has positive relationship with firm growth. Under this study, the research finding also shows the same result, if we look at the regression analysis result describes initial investment has positive and significant effect on firm growth in Bahir Dar city administration. This result is as same as other research findings incorporated above. Generally, the research found that firms began with higher initial investment amount registered better growth than those started with small amount of initial investment. The result therefore stated that the higher the initial investment, the greater growth rate has actually registered in MSEs in Bahir Dar city administration.

Another variable tested under this research study, is the relationship between education and firm growth. Under this issue, researchers have common understanding, which is therefore as education increases, the capacity to produce and to deliver products increases. Different writers and researchers outlined that indifferent group levels. However, they found the same result, which stipulates as educational level increases, growth rate of firm's increase. By considering those research findings, researcher of this study analyzed the data properly. As of the descriptive statistics and regression analysis, the result shows lower level education has no effect on productivity and growth of the firm. However, the higher education level has positive and significance impact on firm growth. To come-up with conclusions, according to our finding, as education increases, firm growth rate significantly increases. Thus, in diploma and degree education level managers have better performance than primary and secondary level of education. It is understandable, as level of education of firms' owner increases, the growth rate also goes up. When look at the study findings firms owned by degree and diploma holders grow better than firms owned both by primary and secondary level educated individuals.

Before finalize our research conclusion, another variable also examined as if the determinant factor firm growth. It is gender of the owner. In various previous researches like the above variables gender of the owner, also prominently determine the growth of MSEs. However, in this study gender has no significant effect on firm growth. Because firms owned both by male and female scored the same growth rate. Gender in Bahir Dar city is not therefore the prominent factor for firm growth. As we see in other researches, gender has great impact, it was due to social factors, and the government gives more focus for female. Whereas in Bahir Dar the city administration gave equal chance both for male and female owned firms, in providing land access, credit access and other occupational related trainings. These help them to be competent as equal as male owned firms. In addition to that, the public trust on female productivity gradually changing and the public awareness towards females' productivity also improved.

### 5.2. Conclusion

From the above all summaries, the researcher put the following concluding remarks sums. Some determinant variables raise arguments among researchers. For instance, age, size and firm growth have no relationship and against. However, in this study as age and size increase firm growth also increases, which states that they have positive relationship and significantly affected MSEs in our study. In addition to that, gender of the owner was also argumentative however, in this study it described that gender of the owner has no effect on firm growth. Generally, seven determinant factors or regressors have incorporated under the study, among those variables educational level, access to credit, firm size, age of the firm, and initial investment are significantly affected MSEs' growth in the Bahir Dar city administration. However, the remaining variables like; access to land and gender have not significance impact on growth of micro and small firms in our study area. To come-up with those concluding remarks the researcher used various research technique and procedures.

### 5.3. Recommendations

The research has expected to address the research problems through thorough analysis and to forward the implications for the concerned bodies, individuals and owners of the firm. Such tasks are very popular with enormous researches; the same thing has done in this study also. It does not mean that, it forwarded because it is a procedure rather it is the main aim of researches. As we can see from the above conclusion part, there are many shortcomings, which hindered growth of micro and small enterprises specifically, in Bahir Dar city. The study put the following recommendations accordingly.

1. The study found that most of accessible to credit finance firms have registered better growth than inaccessible, this is strongly affected most urban agriculture and construction, because the government debt program prioritized for manufacturing enterprises. This creates to lagging behind for the other business enterprises. The government therefore, should consider as the rest firms also have significance impact on national economic growth. By enduring private financial institutions, the government can positively affect their financial need, which can expand their growth rate. Beside to the government contribution, firms' owners should actively involve in strengthening their financial needs. For instances; by increasing saving habit in formal financial institutions, like banks and MFIs, and creating joint venture they can improve their competition. This may help firm to improve their growth.

2. The city administration should provide land for all types of firms and give training them how they can manage their promises in improving productivity. Besides that, owners may consider ways of handling and wise land use on minimizing cost and increasing their growth. In addition to land use management, firm owners and coordinators of MSEs' office should work hand- in-hand expanding size of the firm through borrowing many even from individuals and private institutions. This may reduce the amount of collateral required by government, and through materials rent from accessible bodies. Those lead them to maximize their growth through expanding firm size and land access and wisely use it.

3. The study showed initial investment also has positive and significance impact on firm growth. This factor has a power to scale up productivity and investment increment. In the study finding; the larger initial investment, the higher the growth rate has scored by firms. Therefore, firms should create joint venture with other same firms for increasing their investment capacity. Besides that, government also should relax its investment requirements and borrowing criteria, create market access to expand their capital.

4. As investigated in the analysis part in chapter four, educational level is the prominent factor for firm growth. Mainly, the higher-level education has better impact that lower level. The managers or owners of the businesses should take in to consideration and upgrade their level of education in to the higher level to improve their firm growth through night, distance and other optional directions if so. Because, the research found that the higher the education the greater growth rate scored by firms. Not only manager and owner of the businesses but also employees should also improve their educational level.

5. The Bahir Dar city administration should technically support the MSEs' owners in expanding their firm size by providing technical and vocational educated and skilled workers to the market.

Finally, it suggested that the administration of MSEs in Bahir Dar city support firms to improve their firm growth, by improving their educational level, financial sources by using formal and informal financial sources such as IQQUB and the like. Since education and source of finance are the main determinants, both the government and firm owners jointly perform on improvements of education through various dimensions and financial sources; such as distance and night programs.

### 5.4. Future Research

This academic paper is preliminary study some determinant factor that affects micro and small-scale enterprises; specifically, on manufacturing, construction and urban agriculture. It is path for the next study expansion on the other determinants including study areas. Because of scope limitation of this study, it may conduct detailed studies in various cities of the country. To specify and better understand firm growth determinants, researchers can

- Look at the effect of bureaucratic ties and corruption on growth of micro and small-scale enterprises in the various areas of Ethiopia.
- Expanding and continuing this study to other areas, and sector of businesses, environments have same or different impacts on growth.
- It is also recommendable that researchers to focus on longitudinal study through scientific research study (using pure secondary data), and encourage firm owners to use accounting and financial records properly.
- Finally, future studies can also focus on resource management, micro, and small scale firms, because these areas are currently facing enormous problems.

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