



**Addis Ababa University
College of Business and Economics
Department of Accounting and finance**

**FACTORS AFFECTING THE PROFITABILITY OF SMALL
AND MEDIUM ENTERPRISES IN SOUTH GONDAR:
EVIDENCE FROM WORETA TOWN**

**BY
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MEDIUM ENTERPRISES IN SOUTH GONDAR: EVIDENCE FROM
WORETA TOWN**

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Addis Ababa University
School of graduate studies

This is to certify that the thesis prepared by Gebrie Worku entitles “**Factors affecting the profitability of Small and Medium Enterprises in South Gondar: evidence from Woreta town**” and submitted in partial fulfillment of the requirements for the degree of masters of Science in accounting and finance compiles with the regulations of the university and meets the accepted standards with respect to originality and quality.

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Declaration

I, **Gebrie Worku**, hereby declare that, the thesis work entitled “**Factors affecting the profitability of Small and Medium Enterprises in South Gondar: evidence from Woreta town**” submitted by me for the award of the degree of Masters of Science in Accounting and Finance of Addis Ababa University at Addis Ababa, Ethiopia, is my original work and it has never been presented in any university and other institution. All sources and materials used for this thesis have been duly acknowledged.

Researcher’s Name: **Gebrie Worku**

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List of Acronyms and Abbreviations

CIR:	Cost Income Ratio
CL:	Current Liability
CR:	Current Ratio
CSA:	Central Statics Agency
DR:	Debt Ratio
EDRI:	Ethiopian Development Research Institute
FATR:	Fixed Asset Turnover Ratio
FeMSEDA:	Federal Micro and Small Enterprises Development Agency
FeSMMIDA:	Federal Small and Medium Manufacturing Industry Development Agency
FeUJCFSA:	Federal Urban Job Creation and Food Security Agency
Log SIZE:	Logarithm of Firm's Size
MFI:	Micro Finance Institutions
MSEs:	Micro and Small Enterprises
MSMEs:	Micro, Small and Medium Enterprises
NI:	Net Income
ROA:	Return on Asset
SMEs:	Small and Medium Enterprises
TVET:	Technical and Vocational Education and Training

ABSTRACT

It is well established that SMEs development can create huge employment opportunities and enhance to reduce poverty and improves the living standards of society as well as overall country's economy. This study was designed to assess the factors that affect the profitability and growth of Small and Medium Enterprises (SMEs) in Woreta town, South Gondar as a case study. The study used explanatory research design to determine the effect of firm's size, liquidity, efficiency, asset management and leverage to the profitability of SMEs by selecting a sample of 12 SMEs those engaged business activities in Woreta town South Gondar for the last 5 year was taken for the study by using purposive sampling technique. The study used the regression model and collect data from Twelve (12) SMEs covering the period of Five (5) consecutive years, 2013-2017 with a total of 60 observations. To this end, the study employed a quantitative research approach by using financial statement (both statement of profit and loss and statement of financial position) that reported to revenue office. The study used panel data and E-view 8 software. The study used one dependent variable return on asset (ROA) and six independent variables; firm's size, current ratio, cost income ratio, fixed asset turnover ratio and debt ratio. The findings of regression result revealed that explanatory variables firm's Size and Cost Income Ratio had a negative significant effect on profitability and growth of SMEs but Current ratio and Debt Ratio had a negative insignificant effect on profitability and growth of SMEs whereas Fixed Asset Turnover Ratio had positive significant effect on performance of profitability of SMEs in Woreta town. Finally, the study recommended that SMEs supervisors, owners, government bodies and future researchers should be given more attention to these variables to reducing the weaknesses of SMEs resource utilization by improving economies of scale.

Keywords: Profitability, ROA and SMEs

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

The main objectives of business enterprises are always trying to get positive profit and gain by subtracting all of their expenses that they incurred to generate revenues. The ability to generate profit is the most important point of an enterprise's survival and success. The integration of two words, profit, and ability formed the word profitability. The term ability shows the financial and operational power of a business to earn profits, which is called the earning performance of an enterprise (Moaveni, 2014).

Profitability is influenced by many factors that are classified in three main parts: enterprise-specific or internal factors (i.e. operational efficiency, enterprise size, age and capital ratio), industry-specific or external factors (i.e. market share or concentration), and macroeconomic (i.e. inflation and GDP growth). Also, pricing, offering discount and commission on product and services and tax rate lead to the change in profit. In addition, (Moaveni, 2014) enterprises can be distinguished with respect to its process innovation, the growth of loans and funding costs. Other factors that can impact profitability are leverage ratio, financial risk, business model, lagged profit and economic environment.

In line with this, a considerable number of studies issued on the performance of the SMEs both at the microeconomic and macroeconomic level and proves the importance of financial management issues in terms of improved results and competitiveness of enterprises. This is also the main concern of managers and entrepreneurs because the company's performance is directly correlated with the SMEs chance of survival and growth. Company's performance reflects the effectiveness and efficiency of resource utilization and ultimately contributes to the economic development of the country. For instance a research conducted by (Mbugua, Agnes and Ondabu, 2014), (Adegbem *et al*, 2013), (Chuthamas *et al*, 2011) and (Javed *et al*, 2011) findings concluded that availability of management experience, SMEs characteristics, customer and market, access to financial resources are the most important factor in the success of business that perceived by small and medium enterprises even if the success of small and medium enterprises can contribute significantly in the development of the country.

Similarly, with the above, numerous researchers have attempted to explain the determinants of profitability and growth of Small and Medium Enterprises. According to (Hezron and Hilario, 2016) study results, the main factors influencing access to finance by SMEs are the structure of the financial sector, collateral requirements and lack of strong support for small businesses. In line with this, other studies conducted by (Kinyua, 2014), (Fouad, 2013), (Fredrick, 2016) (Prijadi and Desiana, 2017) and (Anthony, 2005) results show that infrastructure, government policy inconsistencies and bureaucracy, environmental factors, Being in a capital city, multiple taxes and levies, access to modern technology, unfair competition, marketing problems and non-availability of raw materials locally and other factors such as corporate governance, human resources management, financial management, general management, production management and marketing management are the greatest problem facing SMEs.

There have been very few studies tried to assess the determinants of profitability and the growth of SMEs by focusing internal financial performance. A study conducted by (Farah and Nina, 2016) and (Rosli, 2011) indicates that that firm size, growth, lagged profitability, productivity, and industry affiliation significantly effect on profitability. However, other variables age and foreign participation in equity ownership have significantly related to the performance of SMEs. This consolidates the earlier expectations and studies that age and foreign ownership do matter to the performance of SMEs so that firm-specific factors are more important than any other factors in determining firm performance.

In addition to the above studies, Ethiopian researchers also studied in a similar area. A study conducted by (Biru, 2014), (Mekonnen, 2014), (Berihu *et al*, 2014) and (Zemenu and Mohammed, 2014) conducted on Factors Affecting the Performance and growth of SMEs in their business activities. According to descriptive analysis, the researchers noted that lack of incentive, shortage of working and sales spaces, lack of rental machinery and stringent licensing requirements. The inadequate credit facility, starting a business without conducting a survey, inappropriate tax imposition, lack of business training, an absence of appropriate technology, uncollectible receivables and lack of financial management skill and experience are the most challenges that micro and small enterprises.

(Admasu, 2012), (Mulugeta, 2010) And (Fredu and Edris, 2016) argues that inadequate finance access, lack of working premises, marketing problems, inadequate infrastructures, poor

management practices, technological, entrepreneurial and politico-legal problems including bureaucratic bottlenecks system. In a similar fashion, SMEs specific factors such as poor financial records of SMEs, lack of adequate collateral, SMEs poor management of risks, and informalities of SMEs are the major obstacles underlined by banks and MFIs to their engagement with SMEs. In general, young firms who do not have adequate managerial and operation experience and those with inadequate collateral are highly credit constrained. In addition, without profitability, businesses cannot be survived for a long period. So, it can be said that profitability is the most important factor to be considered in directing the success of a business. But enterprises are subject to limitations that affect their profitability. In other words, profitability is varying because of some situations such as seasonal and climate conditions, government policies, economic instability and firm's internal factors (Moaveni, 2014). Indeed, studying these factors has become essential not only for the profitability and business's survival but also for the economic development.

To make appropriate decision and measures for these problems, knowing the factors associated with the profitability is a precondition for a problem well stated is half solved. Therefore, the aim of this research was to assess the major factors that affect the profitability of SMEs in Woreta town, South Gondar and tried to recommend the appropriate measures to be taken to overcome those factors of SMEs.

1.2 Statement of the Problem

Most of the large businesses in Ethiopia have started as Small and Medium and have grown to their maturity over long a period by cumulating capital and business management experiences. In Ethiopia, despite the enormous importance of the SME sector to the national economy with regards to job creation and the alleviation of abject poverty, many of the SMEs are unable to realize their full potential due to the existence of different factors that inhibit their growth and performance (Mulugeta, 2010).

However, the existence of a strong small business sector is necessary for the boosting of the economy. The transition of a small-scale enterprise to medium enterprise and medium to large is crucial to preserve the flow of new small businesses into the economy. In addition, such transition or growth will further reduce the unemployment rate and increase the number of products or services offered to the society (Mekonnen, 2014).

Most researchers like (Admasu, 2012), (Mekonnen, 2014) and (Mulugeta, 2010) study result showed that the main factor influencing profitability and growth of SMEs is access to finance that caused by structure of the financial sector, collateral requirements and lack of small business support. In addition to this their focus areas were external factors of SMEs such as marketing problems, inadequate infrastructures, technological, entrepreneurial and politico-legal problems including bureaucratic bottlenecks system but none of them are touched internal factors such as liquidity, efficiency, asset management, firm's size and leverage effects on SMEs. In addition to external factors, internal factors also should be given considerable attention because of firm's internal factors are also influential determinants to be profitable and success. So that, As per the best of knowledge of researcher, Ethiopian researchers did not attempt to address the effect of SMEs internal factors such as liquidity management, operating efficiency, asset management, firm's size and leverage effects on their profitability and growth even if firm's specific financial decision and asset utilization has a great impact on profitability growth of SMEs.

(Rosli, 2011) Also conclude that firm-specific (internal) factors are more important than any other factors in determining firm's profitability and growth. So that focusing on these specific variables are very important to be profitable. (Kaplan and David, 1992) Financial measurement of performance is the traditional and most commonly used tool as a measure of an organizations performance. Financial measures are typically focused on profitability, market value of the firm, return on assets, investment and equity, liquidity and various other ratios analysis. By considering these issues, the study was emphasis on the effect of firm's size, liquidity, fixed asset management, operating efficiency and leverage on the overall profitability of SMEs in South Gondar particularly in Woreta town by applying quantitative research approach. The reason behind to choose Woreta town was the researcher's objective to focus on small towns that are overlooked by most researchers and the accessibility of data to apply quantitative research approach under explanatory research design to achieve specific objectives of the study.

1.3 Objectives of the Study

Generally, the study was designed to examine the factors affecting the profitability of Small and Medium Enterprises in small towns specifically on Woreta town, South Gondar. In line with this general objective, the study tried to address the following specific objectives;

- i. To examine the effect of firm's size on the profitability of SMEs

- ii. To examine the effect of liquidity on the profitability of SMEs
- iii. To examine the effect of operating efficiency on the profitability of SMEs
- iv. To examine the effect of asset management on the profitability of SMEs
- v. To examine the effect of leverage on the profitability of SMEs

1.3.1 Research Hypothesis

The research hypothesis is a predictive statement that relates an independent variable to a dependent variable. Usually a research hypothesis must contain, at least, one independent and one dependent variable (Kothari, 2004). In order to examine the effects of selected explanatory variables on profitability of SMEs in small towns based on theoretical and empirical studies the researcher was developed the following working hypothesis and were used econometric model to test their cause and effect relationships and level of significance.

Return on Asset is dependent variables that used in this study as an indicator of profitability measurement. Besides, based on theoretical and empirical reviews explanatory variables those included in this study are described below then followed by research hypotheses.

Firm size

The effect of this variable on profitability is complex. Large firms face more expenses, such as the agency costs, costs related to managing and bureaucratic process costs (Kevin and Adrienne, 2006). These expenses affect the profitability by reducing it. On the other hand, larger firms have more ability to raise their product than the smaller one. It means that these firms can keep the risk as low as possible which leads to higher profitability. A study conducted by (Chuthamas *et al*, 2011), (Zegeye, 2017) and (Aradom, 2017) size has a significant effect on firm's profitability. The researcher, thus, expects a significant and negative relationship between firm's size and SMEs profitability.

H1: Firm size has significant and negative effect on profitability of SMEs.

Liquidity (Current Ratio)

According to (McLaney, 2009) Businesses need to maintain sufficient current assets to enable them to meet short-term claims as they become due. They need to be able to do this since failure to meet them would entitle the short-term claimants (of current liabilities) to take steps to put the

business into liquidation. This would normally involve the forced sale of some or all of the business's assets, including its non-current assets. A study conducted (Dedunu, 2017) shows a negative relationship Current Ratio with the SMEs profitability. (Bringham and Ehrhardt, 2011) consider the current ratio from the perspective of a shareholder, the high current ratio could mean that the company has a lot of money tied up in nonproductive assets, such as excess cash or marketable securities. On the other hand (Van Horne and Wachowicz, 2008) Perhaps the industry itself is overly liquid, and the company being examined is basically sound despite a lower current ratio. In another situation, the company being analyzed may be too liquid, relative to the industry, with the result that it forgoes additional profitability. Whenever a financial "red flag" is raised, the analyst must search out the reasons behind it. Liquidity ratios are used to measure a firm's ability to meet short-term obligations. One of the most general and frequently used of these liquidity ratios are the current ratio. So that, in this study, to assess the effects of liquidity (current ratio) on the profitability of SMEs the following hypothesis were formulated;

H2: Current Ratio has significant and negative effect on profitability of SMEs.

Operating Efficiency (Cost Income Ratio)

This financial ratio gives the investors a view of changing costs compared to income. (Moaveni, 2014) Rising in this factor has a negative impact on profitability. Actually, higher cost causes this change in cost-to-income ratio and it means that cost of a firm increase in the higher rate than income. In this study, the researcher expected operating efficiency (cost income ratio) will have a significant impact on profitability of SMEs.

H3: Cost Income Ratio has significant and negative effect on profitability of SMEs.

Asset Management (Fixed Asset Turnover Ratio)

The fixed assets turnover ratio measures how effectively the firm uses its plant and equipment to generate profit. If a company has excessive investments in assets, then its operating capital will be unduly high, this will reduce its free cash flow and ultimately its stock price. On the other hand, if a company does not have enough assets then it will lose sales, which will hurt profitability (Bringham and Ehrhardt, 2011). The nature of a company's products and its competitive strategy strongly influence by fixed asset turnover that measures the sales generated per dollar of fixed assets. Some newcomers to finance believe assets are a good thing: the more

the better. (Higgins, 2007)The reality is just the opposite. In this study, the researcher expected asset management will have a significant effect on profitability of SMEs.

H4: Fixed Asset Turnover Ratio has significant and positive effect on profitability of SMEs.

Leverage (Debt Ratio)

The research conducted by (Ana and Machado, 2012) concluded that there is a negative relationship between the degree of leverage and SMEs' profitability and a positive one with their growth. When a firm borrows money, it promises to make a series of interest payments and then to repay the amount that it has borrowed. If profits rise, the debt holders continue to receive a fixed interest payment, so that all the gains go to the shareholders. Of course, the reverse happens if profits fall. In this case, shareholders bear all the pain. If times are sufficiently hard, a firm that has borrowed heavily may not be able to pay its debts. The firm is then bankrupt and shareholders lose their entire investment. Because debt increases return to shareholders in good times and reduce them in bad times, it is said to create financial leverage. Leverage ratios measure how much financial leverage the firm has taken on (Brealey, Myers and Marcus, 2001). The debt-to-total-assets ratio is derived by dividing a firm's total debt by its total assets; it highlights the relative importance of debt financing to the firm by showing the percentage of the firm's assets that are supported by debt financing (Van Horne and Wachowicz, 2008). In line with this consideration, the researcher expected leverage will have a significant effect on profitability of SMEs.

H5: Debt Ratio has significant and negative effect on profitability of SMEs.

1.4 Significance of the Study

As mentioned above, the main objective of the study is to investigate the determinants of profitability and growth of SMEs in small towns. So that, the findings of the study are expected to be significant in that;

- The results of this study will create awareness for new potential investors to give more emphasis on the management of identified variables to achieve their goals of wealth.
- Will provide managers of Small and Medium Enterprises with understandings of financial activities that would be how influence on their overall profitability and growth.

- Will help the government bodies and other actors to focus on factors that obstacle the success of SMEs and will base on providing training to solve those factors.
- Will also provide a guide for further studies in the area.

1.5 Scope of the Study

As (Rosli, 2011) noted that firm-specific (internal) factors are more important than any other external factors in determining firm's profitability. So that, it is important to focus internal variables to determine their effect on SMEs profit. Because of this, the study focused to determine the effect of key determinants such as firm's size, liquidity, efficiency, asset management, and leverage; how affects profitability and growth of SMEs in Woreta town, South Gondar. To this end, the study used quantitative research approach to analyze both statements of profit and loss and statement of financial position for the last five (5) years; because it enhances to assess the most recent factors that affect the profitability of SMEs. The reasons behind to choose Woreta town was the study focus on SMEs in small towns because they lacked the qualified manpower to manage their resources and the accessibility of relevant secondary data (Financial statements) to apply quantitative research approach had a contribute to choosing Woreta town. In addition to this, the researcher believed that trying to study specific area by making a physical observation is better than considering higher population target to determine the specific problems of SMEs.

1.6 Organization of the Thesis

The paper has five chapters. General introduction offered in the first chapter of the study. The relevant kinds of literatures in the field reviewed in the second chapter. Research design and methodology parts are presented on third chapter. Following this, Chapter four contained data presentation, interpretation and analysis of the study. Finally, after summary of major findings, conclusions and recommendations are presented in the fifth chapter and followed by bibliography and relevant appendices presented at the end.

CHAPTER TWO

Literature Review

In the Literature review part of this study, the number of theoretical and empirical works on Small and Medium Scale Enterprises which has received a great deal of attention in development kinds of literature are presented. Accordingly, several development programs and projects have been launched in many developing countries and emphasis is now shifting towards the development of Small and Medium Enterprises in order to increase the productivity, employment opportunities, purchasing power and living standard of their society so as to achieve economic growth and development. Therefore, countries should have programs to develop this sector of the economy because it is the engine of growth for every economy especially in all developing countries like Ethiopia (Mekonnen, 2014). In addition to this, there were some conceptual works done which were used to support the study by determining factors of SMEs profitability. This chapter comprises of two main sections; these are a Theoretical Literature review and Empirical Literature review.

2.1. Theoretical Literature Review

2.1.1. Definition of Small and Medium Enterprises

The SME sector everywhere is characterized by highly diversified activities which can create employment opportunities for a substantial segment of the population. This implies that the sector is a quick remedy for unemployment and poverty problem. The realization of a modest standard of living through curbing unemployment and facilitating the environment for new job seekers and self-employment requires a direct intervention and support of the government and other concerned stakeholders (Mulugeta, 2010).

However, there is no single and universally acceptable definition of a small and medium enterprise (Dalitso and Peter, 2000). This is so because the criteria and ways of categorizing enterprises as small and medium from institution to institution and from country to country depending essentially on the country's level of development. Even within the same country, definitions also change over time due to changes in price levels, advances in technology or other considerations. Firms differ in their levels of capitalization, sales, and employment. Hence,

definitions that employ measures of size (number of employees, turnover, and profitability, net worth, etc.), when applied to one sector, could lead to all firms being classified as small or medium, while the same size definition when applied to a different sector, could lead to a different result. The absence of such uniform definition of SMEs has created a difficulty. In line with this, Tegegne and Meheret 2010 cited in (Admasu, 2012) argued that the absence of a single or globally applicable definition has made the task of counting the number of SMEs and assessing their impact extremely difficult across countries, though the rationale for most governments to make such definition and categorization is mainly for functional and promotional purposes to achieve the desired levels of development of the sector.

Regarding the definition of the term SMEs universally accepted definition is not yet given. This is because of the heterogeneity of SMEs themselves and the nature of the economy in which they operate. This becomes the agent for the absence of establishing feasible global definitions that can be used everywhere in the same manners. Due to this and the other related factors, different countries use different criteria such as the number of employees, assets, employed capital, sales turn over, or combination of the above factors to determine the size of the enterprises. For instance, the most common definitions used by regulators are based on the number of employees, sales and/or loan size (Mekonnen, 2014).

2.1.2. SMEs Definition and Enterprises Characterization in Ethiopia

Though Micro, Small and Medium Enterprises (Amare and Raghurama, 2017) constitute the major share in terms of number in Ethiopia, there is no consistently placed definition for the sub-sector by different bodies. To align the definition with at least some countries and international organizations, the country has revised the definition of Micro and Small Enterprises in 2011.

In the new definition, some of the attributes used by other countries and international organizations are addressed. In addition, the definition has segregated sectors as service and manufacturing. However, there is still confusion among different governmental organizations (e.g. Ministry of Trade, Central Statistics Agency, & Federal Micro and Small Enterprises Development Agency (FeMSEDA) in defining MSEs. Moreover, since it only focuses on Micro and Small Enterprises, the new definition does not put any demarcation between Small and Medium; and Medium and large Enterprises.

Federal Micro and Small Enterprises Development Agency (FeMSEDA), on the other hand, put the definition of Micro and Small Scale Enterprises and categorize them from support provision perspective which contempt Medium Enterprises. With these precincts in defining and characterizing Micro, Small and Medium Enterprises in Ethiopia, adopting definition of MSMEs with slight modification is compulsory (Amare and Raghurama, 2017).

Table 2.1: Definition of MSEs in Ethiopia by Regulation No. 201/2011

Level of the enterprise	Sector	Human power	Total asset
Micro enterprise	Industry	≤5	≤100000(\$6000 or E4500)
	Service	≤5	≤50,000(\$3000 or E2200)
Small enterprise	Industry	6-30	≤ birr 1.5 million (\$9000 or E70000)
	Service	6-30	≤ birr 500,000(\$30000 or E 23000)

Source: FeMSEDA, 2011

CSA's definition is based on the size of employment and extent of automation. Hence, according to CSA,

- Large and medium scale manufacturing enterprises have been classified as establishments with more than ten employees and using automated machinery. Small enterprises are establishments that engage less than 10 persons and using power-driven machinery.
- Cottage/handicrafts are household type enterprises located in households or workshops normally using own or family labor and mostly manual rather than automated/mechanical machinery.

The limitations of the CSA definition are, it ignores the size of capital and the sectors outside of manufacturing. Another point worth mentioning is that, while Ethiopia targets Micro and Small enterprises, many other developing countries target Small and Medium Enterprises (Berihu, Abebaw, and Biruk, 2014).

Currently, federal micro and small enterprises development agency (FeMSEDA) divided into two separate agencies Federal Small and Medium Manufacturing Industry Development Agency

and Federal Urban Job Creation and Food Security Agency. According to Regulation No. 373/2016, Federal Small and Medium Manufacturing Industry Development Agency defined "Small Manufacturing Industry" means an industry having a total capital, excluding building, from Birr 100,001 to Birr 1,500,000 in the manufacturing sector and engages from 6 to 30 workers including the owner, his family members and other employees and "Medium Manufacturing Industry" means an industry having a total capital, excluding building from Birr 1,500,001 to Birr 20,000,000 in the manufacturing sector and engages from 31 to 100 workers including the owner, his family members and other employees; whereas under Regulation No. 374/2016 Federal Urban Job Creation and Food Security Agency defined "Small Enterprises" means an enterprise having a total capital, excluding building, from Birr 50,001 to Birr 500,000 in the case of service sector or Birr 100,001 to Birr 1,500,000 in the case of urban agriculture, artisanal mining, and construction sector engages from 6 to 30 workers including the owner, his family members and other employees.

Table 2.2: Definition of MSMEs by World Bank

Enterprise indicators	Number of employees	Total asset	Total annual sales
Medium	>50; < 301	>\$3,000,000;< \$15,000,001	> \$3,000,000; < \$15,000,001
Small	>10; < 51	>\$100,000; < \$3,000,001	> \$100,000; < \$3,000,001
Micro	<10	< \$100,001	< \$100,001

Source: Tom and Van der (2008) cited in (Amare and Raghurama, 2017)

When compare the Ethiopian current definition of Small and Medium Enterprises with the above table, a very visible gap, resulted from the economic status of the country is observed. The figure is very significant that makes a comparison between Ethiopian Enterprises and Enterprises labeled by international organizations (e.g. World Bank) difficult. To reduce the gap, a forward move could be one solution for Ethiopia SMEs (Amare and Raghurama, 2017).

2.1.3. Methods of Measurement Firm's Performance

According to (Martin *et al*, 2010) performance is defined simply in terms of output terms such as quantified objectives or profitability. Performance has been the subject of extensive and

increasing empirical and conceptual investigation in the small business literature (John, 2009). The issues that remain unresolved are the goals against which performance should be assessed and from whose perspective the goals should be established.

(Rami and Ahmed, 2007) On their study defined performance as follows.

“The most commonly adopted definition of success [good performance] is financial growth with adequate profits. Other definitions of success [good performance] are equally applicable. For example, some entrepreneurs regard success [good performance] as the job satisfaction they derive from achieving desired goals. However, financial growth due to increase profits has been widely adopted by most researchers and practitioners in business performance models”.

A business enterprise could measure its performance using the financial and non-financial measures. The financial measures include profit before tax and turnover while the non-financial measures focus on issues pertaining to customers’ satisfaction and customers’ referral rates, delivery time, waiting for time and employees’ turnover (Chong, 2008).

Although much research has been conducted on the issues of performance measurement; the definition of performance measurement is still debated. Neely (1998) cited in (Wu, 2009) defines Performance Measurement as “the process of quantifying the efficiency and effectiveness of past actions through analysis, interpretation and dissemination of appropriate data”. (Moullin, 2003) Thought that while Neely’s definition describes the process, “it does not give much guidance to organizations about what it is essentially all about.” He suggests that another definition, “performance measurement is evaluating how well organizations are managed and the value they deliver for customers and other stakeholders” (Moullin, 2003). This definition clearly shows the purpose of performance measurement and emphasizes the assessment both of the value an organization gives to its various stakeholders and the way the organization is managed.

2.1.3.1. Balanced Scorecard

The balanced scorecard was developed by (Kaplan and David, 1992) and is perhaps the most well-known performance measurement framework. It is formulated to include financial measures that report results on customer satisfaction, internal processes, and the improvement activities – operational activities or measures that are drivers for the future financial performance. The

Balance Scorecard suggests that managers should view organization's performance from four perspectives,

- (a) How do customers see us? - Customer perspective
- (b) What must we excel at? - Internal perspective
- (c) Can we continue to improve and create value? - Innovation & learning perspective
- (d) How do we look to shareholders? - Financial perspective

Customer Perspective

This perspective will aid the company in addressing the important concerns of the customers and build continued patronage. Hence, to put the balanced scorecard to work, core measures ought to include overall indicators such as customer satisfaction, customer complaints, production of new products, retention of customer, customer profitability, on-time delivery etc. This can be summarized under clearly defining goals for time, quality, performance and service and converting these goals into specific measures. In view of all this, organizations must yet still remain sensitive to the cost of their products (Kaplan and David, 1992).

Internal Business Perspective

This perspective aims at the identification and improvement of critical internal business processes that yield a competitive edge and result in greater customer satisfaction. The internal business perspective is based on the assumption that to satisfy customers and earn a financial return, the organization must be efficient and effective at what it does. Thus, these perspective's measurements are typically based on the objective of producing products and providing services that meet customer satisfaction efficiently and effectively.

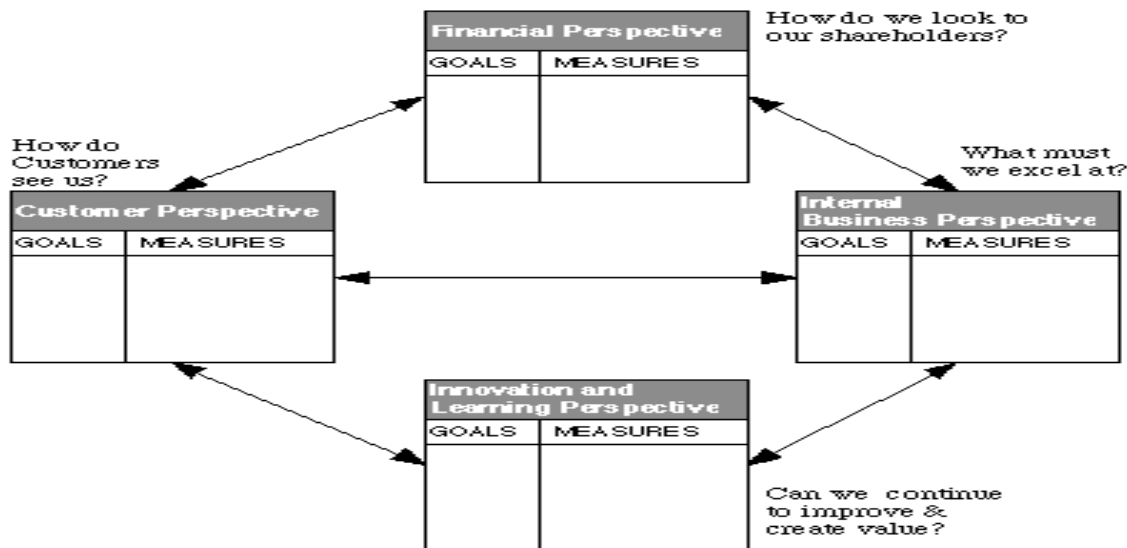
Innovation and Learning Perspective

Innovation has become a key factor in the knowledge economy. This innovation and learning perspective can be measured in a variety of ways, these may include; the speed of transactions, IT usage, training and development, new product and services development and strategic alliance and partnership. An organizations ability to innovate and learn improves its operating efficiency causing the organization to grow and thereby increase shareholder value (Kaplan and David, 1992).

Financial Perspective

The financial measurement of performance is the traditional and most commonly used tool as a measure of an organizations performance. Financial measures are typically focused on profitability, the market value of the firm, return on assets, investment and equity, liquidity and various other ratios.

Figure 2.1: The Balanced Scorecard



Source: (Kaplan and David, 1992)

2.1.3.2. Profitability Ratio Analysis

In general, Profitability ratios – concerned with effectiveness at generating profit. The term, profit stands for the difference between revenue and costs. However, for one and the same activity, profit does not necessarily have to be the same number under different points of view. Different accounting standards or special regulations for taxation make organizations display different profits in financial statements for different purposes. On top of that, profit from the accountant’s point of view is not equal to profit from the economist’s point of view. This difference is not based on different principles on what to evaluate but is fundamentally different understandings of costs and profits, Dagmar 2001 cited in (Bidzakin, 2009). Generally in accounting and economics profit can be defined as ***Profit = Total Revenue – Total Costs.***

According to (Brigham and Ehrhardt, 2011) financial statements report both a firm's position at a point in time and on its operations performance over some past period. However, the real value of financial statements lies in the fact that they can be used to help predict future earnings and dividends. From an investor's standpoint, predicting the future is what financial statement analysis is all about, while from management's standpoint, financial statement analysis is useful both to help anticipate future conditions and, more important, as a starting point for planning actions that will improve the firm's future performance. The most useful way to evaluate ratios involves tending analysis: Calculate ratios for a company over several years, and note how they change over time (Higgins, 2007). Trend analysis avoids the need for cross-company and cross-industry comparisons, enabling the analyst to draw firmer conclusions about the company's financial health and its variation over time.

The success of a small business can be measured in various ways. However, success is predominantly measured in terms of financial performance including profitability, sales, and market share. Internally, (Van Horne and Wachowicz, 2008) management also employs financial analysis for the purpose of internal control and to better provide what capital suppliers seek in financial condition and performance from the firm. The financial analysis involves the use of various financial statements. These statements do several things. First, the balance sheet summarizes the assets, liabilities, and owners' equity of a business at a moment in time, usually the end of a year or a quarter. Next, the income statement summarizes the revenues and expenses of the firm over a particular period of time, again usually a year or a quarter. Though the balance sheet represents a snapshot of the firm's financial position at a moment in time, the income statement depicts a summary of the firm's profitability over time.

Functional Ratios'

The most important and commonly adopted classification of ratios is on the basis of purpose or function which the ratios are expected to perform. Such ratios are also called 'functional ratios'. They include solvency ratios, liquidity ratios, activity ratios and profitability ratios. In fact, the entire ratio is can be discussed analysis in relation to the orientation of the functional basis of ratio classification.

- ↳ Solvency ratio reveals the long-term solvency of the firm. They show the relative interest of the owners and creditors in the enterprise
- ↳ Liquidity ratios bring out the ability of the firm to honor its financial obligations as and when they are mature
- ↳ Activity ratio measures the efficiency capacity with which funds have been employed in the business operations
- ↳ Profitability ratio measures the profitability earning capacity of the enterprise. The profitability of the firm can be viewed from the point of management, owners, and creditors.

In line with this, (Bringham and Ehrhardt, 2011) noted that profitability is the net result of a number of policies and decision. The ratios examined the effectiveness of a firm's operations, but the profitability ratios go on to show the combined effects of liquidity, asset management, and debt on operating results.

2.2. EMPIRICAL REVIEWS

2.2.1. Worldwide Literatures

The research conducted on Factors Affecting Business Success of Small & Medium Enterprises (SMEs) in Thailand by four researchers (Chuthamas *et al*, 2011) to provide the understanding on how people should start their business by looking at all the factors affecting business success hence help to reduce the risk of failure and increase chances of success. They employed Descriptive and Correlations Analysis. To gather the research data a self-designed questionnaire using 5-point liker scale was used. A total of 200 hardcopy and softcopy questionnaires were distributed to selected respondents and The regression analysis result shown that the most significant factors affecting the business success of SMEs in Thailand were SMEs characteristics, customer and market, the way of doing business, resources, and finance, and external environment.

Another joint study conducted by (Ana and Machado, 2012) on Financial and Strategic Factors Associated with the Profitability and Growth of SME in Portugal through using the sample comprises 134 unquoted SMEs aged five years or more, operating in different sectors throughout the main districts of Portugal. Relevant data were collected through face-to-face interviews and

these are supplemented with secondary sources. Twenty-one independent variables are identified and LISREL is used to produce measurement equations relating the variables to factors. Hypotheses concerning the factors' impact on profit and growth were tested through structural equation modeling using LISREL (Linear Structural Relations) to contribute to the understanding of the Portuguese SME sector by reporting on a study of the factors associated with their growth and profitability focusing on financial and strategic factors. The results show that low debt, effective liquidity management, operation in a profitable sector, the avoidance of a low-cost approach, the use of differentiation and the avoidance of a customer focus are associated with SMEs' profitability. For high growth, effective liquidity management and differentiation remain important but a product focus is also required. The relationship between leverage and profitability is less useful.

A study separately conducted by (Rokas, 2012) in the title of the impact of macroeconomic indicators upon SME's profitability by using a correlation analysis, to explore the relationship between macro indicators and corporate profitability. To achieve these objectives, a systematic, logical, comparative, horizontal and vertical, correlation-regression analysis was used. The study integrates empirical material and theoretical knowledge, quantitative and qualitative data. They tried to compile a model of the macroeconomic factors affecting SME profitability and to analyze the dynamics of SME profitability. The results show that Most of the selected macroeconomic indicators such as inflation, average wages, the number of enterprises, and the monetary base were found not to be statistically significant and had no strong correlation with corporate profitability. Unemployment has the biggest impact on profitability. The correlation is negative, which means that the rising unemployment reduces the profitability of firms. The survey has also shown that there is no statistically proven correlation for companies between the paid taxes and the profit. The interbank interest rate changes have a strong, statistically-based impact on profitability.

(Rosli, 2011) Examine factors determining the performance of SMEs on the title "Determinants of small and medium enterprises performance in the Malaysian auto-parts industry. In the study, both descriptive and inferential analyses were adopted to analyze the data. Besides descriptive statistics, a standard multiple regression analysis was employed to examine the relationship between the specified independent and dependent variables. Using the Statistical Package for

Social Science (SPSS Data for this paper were collected from primary and secondary sources). The total number of auto-parts manufacturers available was 124 out of which 53 or 42.7% were SMEs and 71 or 57.3% were large firms. For the purpose of his study, all the SMEs were surveyed using a structured questionnaire & the secondary data for annual turnover, market share, and the number of employees was obtained or calculated from the information provided by Proton's Vendor Association, the Company Commission of Authority. The results indicate that there are positive relationships between the specified dependent and independent variables. However, only two variables - age and foreign participation are significantly related to the performance of SMEs. This consolidates the earlier expectations and studies that age and foreign ownership do matter to the performance of SMEs. Firm-specific factors are more important than any other factors in determining firm performance.

Another research conducted by (Prijadi and Desiana, 2017) on Factors Affecting the Profitability and Growth of Small & Medium Enterprises (SMEs) in Indonesia with the aim of endeavor to discover drivers of SMEs' profitability and growth by using both Descriptive Statistics and Correlation research design. They use relatively large sample size and the cross-sectional nature of the data and the use of the ordinary least-square method for the records (financial and non-financial) of 3,964 SMEs in 2015. The results indicate that female causes better sales, but not profitability. Owner's involvement in the business does not affect growth but adds profitability. Surprisingly, experience drives the growth and profitability down. Being in a capital city hurts SMEs' growth, but does not affect profitability. Among macroeconomic variables, only Bank Indonesia's rates affect SMEs' profit.

The research conducted by (Farah and Nina, 2016) to examine factors affecting profitability such as firm size, firm age, growth, lagged profitability, productivity, and industry affiliation of SMEs firm listed in Indonesia Stock Exchange. In their study data were gathered from the balance sheet, income statement, and other financial data of PEFINDO 25 IDX during the period of 2007-2012 and The data was collected in this research is 132 observations, the sample included from 22 companies multiplied by 6 years. The results showed that firm size, growth, lagged profitability, productivity, and industry affiliation significantly effect on profitability. While the variable that firm age does not significantly influence profitability. The results of the regression coefficient indicate that the variables firm size, growth, and lagged profitability have a negative

effect on profitability, While the variable productivity, and industry affiliation have a positive impact on profitability.

2.2.2. African Literatures

The group study conducted by (Mbugua *et al*, 2014) on the title “Factors Affecting the Performance of Small and Micro Enterprises in Limuru Town, Kenya”. The descriptive research design used and to achieve the objectives Quantitative data were taken a sample of 274 SMEs from 965 licensed SMEs in Kenya and was analyzed by the use of statistical package for social sciences (SPSS). In this study, they concluded that access to finance and availability of management experience are the key socio-economic factors affecting the performance of SMEs businesses in Limuru Town Market. The other key factors that were found to affect businesses in Limuru Town Market positively are access to business information, access to infrastructure and government policy and regulations.

According to (Kinyua, 2014) in her study on Factors Affecting the Performance of Small and Medium Enterprises in Nakuru Town, Kenya states that access to finance had the potential to positively affect performance of SMEs; management skills were found to positively and significantly affect performance of SMEs; macro environment factors were found to significantly affect performance and Infrastructure did not significantly affect performance of SMEs in the study area. The study results also indicated that the number of years in operations increased the performance increased. The study was adopted a survey research design and employed a stratified random simple sampling. There were 759 SMEs in Nakuru Town as per Nakuru municipal council licensing department Primary data was collected from 262 study respondents using structured questionnaires. The data were analyzed descriptively and presented through figures, tables, and percentages to evaluate the factors affecting the performance of SMEs in Nakuru town, Kenya.

A jointly study on “Small and Medium Scale Enterprises Financing and Economic Growth in Nigeria” by (Adegbelemi *et al*, 2013) to empirically evaluate the impact of SMEs financing on Economic growth in Nigeria with the use of time series data covering the period of 1992-2009 in Nigeria by using two different statistical methods (simple percentage and chi-square) were employed to analyze data. In order to develop strong, robust and reliable models that capture the relationship between SME financing and economic growth, the research work adopts the

econometric techniques of the Ordinary Least Square (OLS) is used as the estimation technique. The findings their study shows that loan to small-scale entrepreneurs have a positive impact on the economic performance while interest rate has a negative impact on economic growth. The study thereby concludes that the greatest or worst problem confronting SMEs in Nigeria is managerial capacity. Access to capital or finance is necessary but not a sufficient condition for successful entrepreneurial development.

Another study conducted by (Hezron and Hilario, 2016) to investigated the factors influencing access to finance by SMEs in Mozambique in order to set some light on how the problem of access to finance would be addressed to reduce the number of SMEs collapsing under the title of Factors influencing access to finance by SMEs in Mozambique: case of SMEs in Maputo central business district and used Descriptive. They were collect data from the target population was 2725 which comprised of 2075 staff of three Banks and 650 SMEs in Maputo Central Business District. The research focused on a sample size of 242 SMEs and 324 staff of the named Banks In this study, both simple random sampling and stratified sampling was used. Simple random sampling was used in order to select the SMEs from the total population. The stratified sampling was used to classify the respondents into categories that included the relevant management and the staff dealing with SMEs from banks. The findings from the study were that there is a relationship between the structure of the financial sector and access to finance by SMEs; there is a relationship between awareness of funding and access to finance by SMEs; there is a relationship between collateral requirements and access to finance by SMEs; and there is a relationship between small business support and access to finance by SMEs.

(Asma *et al*, 2015) In their study reveals that the growth of SMEs in Algeria is hampered by several inter-related factors, which include business environmental factors that are beyond the SMEs' control and internal factors of the SMEs. The external factors include the legal and regulatory framework, access to external financing, and human resources capacities. The internal factors comprise entrepreneurial characteristics, management capacities, marketing skills, and technological capacities in the title of Establishing the Factors Affecting the Growth of Small and Medium-sized Enterprises in Algeria by employed a multi-methodology approach in which both quantitative and qualitative methods are used. They were applying a qualitative approach to review the literature in an exploratory nature and to explain and comprehend the research

findings. They also employ a quantitative method to measure the factors that affect the development of SMEs in Algeria. For this purpose they use the data from the World Bank Enterprise Surveys 2017-2012 to identify the most binding constraints on SMEs' operations in Algeria.

(Fouad, 2013) States that poor management skills such as human resources management, financial management, general management, production management and marketing management result in the poor performance of SMEs in the manufacturing sector of Cairo, Egypt (Shortage of finance, Skills shortages) by investigate whether economic factors, human resources and management factors affect the performance of SMEs in the title "factors affecting the performance of small and medium enterprises (SMEs) in the manufacturing sector of Cairo, Egypt" and data were collect from population of the study consisted of managers and owners of SMEs in Cairo and self-designed questionnaire was used to gather the research data on total 50 sets of questionnaires were distributed among managers of SMEs using 5-point Likert scale anchored by strongly agree to strongly disagree.

(Fredrick, 2016) Conducted a research on factors that affect financial performance of small and medium enterprises in Kenya for the purpose of this study was to determine factors that affect financial performance of small and medium enterprises (SMEs) in Kenya and to assess the effect of corporate governance, the effect of human resource capacity, the influence of access to financing on financial performance of SMEs. In his study a descriptive research design was adopted and the target population of the study included the 4,560 SMEs in Nairobi County. Data were available from the Ministry of Trade and Ministry of Industrialization, (2013) revealed that there were 2500 SMEs in Manufacturing, 1500 SMEs Trading and 560 SMEs in the service industry. Stratified sampling technique was used to determine a sample size of 100 from the total population. For this study, data was collected using structured questionnaires based on the research questions. Descriptive statistics included frequencies distribution, and percentages and mean, while inferential statistical analysis used included correlations, and regression. The Regression results indicated corporate governance affects financial performance positively and significantly, human resource affects financial performance positively and significantly, access to finances affects financial performance positively and significantly.

2.2.3. Ethiopian Literatures

(Biru, 2014) The study on “The Impact of Subsidy on the Growth of Small and Medium Enterprises (SMEs)” to analyze the subsidy program for SMEs in Ethiopia in terms of their growth towards accelerating the industrial transformation process by using descriptive as well as econometric analysis w i.e., the logit model analysis to address the growth rate of SMEs with the subsidy program has adopted he was gathered data from the regional and federal ministry of trade and industry annual reports from 2008 to 2011 in the case of Tigray Region. For the purpose of this study, these SMEs were organized into different strata based on establishment year, start-up capital, and number of members in the group. The result of study shows that the support by the government is more at the lower level of enterprises. But, when the enterprises grow the support decreases accordingly. Thus, as the SMEs do not have any incentive to grow, they prefer to stay small rather than grow to medium or large enterprises and this results dependency and inefficiency in the operation of SMEs.

According to (Zemenu and Mohammed, 2014) concerned with the identification of the factors affecting the sustainability of MSEs operating in the title of Determinants of Growth of Micro and Small Enterprises in Ethiopia (A Case of MSEs in Mekelle City, Tigray). On their study, Primary and secondary data are used to achieve the determined objectives. Primary data is collected through questionnaire and secondary data is collected from the sub-cities’ trade and industry offices. The collected data is analyzed using descriptive analysis. The target populations of the research are owner managers of SMEs operating in Mekelle city, the sample size is proportionally taken from each sub cities (proportional Quota Sampling technique) based on simple random sampling technique and they get a grand total sample of 388, at 95 % confidence level and 0.05 precision levels. According to the analysis intensive competition, inadequate credit facility, starting business without conducting survey, inappropriate tax imposition, inappropriate tenure, lack of business training, shortage of working capital, absence of appropriate technology, uncollectible receivables and lack of financial management skill and experience are the top ten challenges that micro and small enterprises of Mekelle city facing . Among the five sectors (as categorized by the MSE agency), the service sector is the most unstable sector. On the other hand manufacturing sector is the most sustainable sector in Mekelle city.

The study conducted by (Admasu, 2012) on Factors Affecting the Performance of Micro and Small Enterprises in Arada and Lideta Sub-Cities, Addis Ababa in the aim of to assess factors that are most affecting the performance of SMEs in two sub-cities of Addis Ababa, namely Arada and Lideta sub-cities by descriptive and explanatory research. The study was utilized cross-sectional in the sense that all relevant data were collected at a single point in time. The study also employed both primary and secondary sources of data collection through well-designed questionnaire as a best instrument. Stratified random sampling was used to get information from different sizes of the MSEs. The target populations of the study were 719 enterprises which include food processing (345), textile and garment (190) and wood and metal work (184). Accordingly, 261 respondents were selected from the total of 719 MSEs. The empirical study elicited eight major challenges which seem to affect the performance of MSEs in sub-cities which include: inadequate finance, lack of working premises, marketing problems, inadequate infrastructures, poor management practices, and technological, entrepreneurial and politico-legal problems including bureaucratic bottlenecks system. The findings further assured that exists linear and positive significant ranging from substantial to a strong relationship was found between independent variables and dependent variable.

(Netsaalem, 2011) Investigated the factors that affecting the performance of micro and small enterprises in Harar and explore the factors affecting the performance of Micro and Small Enterprises in Harar. For this study 135 sample respondents were randomly selected from 45 MSEs (13 from Shenkor, 16 from Aboker and 16 from Genela Woreda) from Construction, metal and woodwork, urban aesthetics and food processing enterprise were the focus of this study. In order to satisfy the specific objectives of the study primary data were collected and analyzed using descriptive statistics and multiple linear regression models by Statistical Package for Social Science (SPSS) computer program. The result from regression analysis depicted that, the significant factors that influence MSE performance at a different significant level were credit utilization, training, and working machinery. The result from the stakeholders' analysis showed that there is an inadequate linkage between MSE and these relevant stakeholders. This research furthermore explores the transformation capacity of MSE in the study area. The result from the relationship between profitability and transformation capacity of the MSE showed that 33.3 % of the respondents on aggregate said that their enterprise is less capable or unable to transform to

medium or large scale enterprises and 21.5% said they don't know the capacity of transformation.

(Mulugeta, 2010) In the work of factors affecting the performance of women entrepreneurs in micro and small enterprises (the case of Dessie town) used a sample of 203 women entrepreneurs engaged in 5 sectors was taken for the study using stratified and simple random sampling. Questionnaire in a closed-ended and Likert scales was used. Moreover, interviews were held with top officials of MSEs, micro finances, and TVET educators. After the data has been collected, it was analyzed using simple statistical techniques (tables and percentages) and descriptive statistics (mean and standard deviations) to assess the factors that affect the performance of women entrepreneurs in MSEs. The results of the study indicate the personal characteristics of women entrepreneurs in MSEs and their enterprise affect their performance. It also shows that lack of own premises (land), financial access, stiff competition, inadequate access to training, access to technology and access to raw materials were the key economic factors that affect the performance of women entrepreneurs in MSEs. The study also found that conflicting gender roles, social acceptability, and network with outsiders were the major social factors that affect these entrepreneurs .Furthermore, the main legal/ administrative factors include access to policymakers, high amount of tax and interest, bureaucracies and red tapes, and overall legal and regulatory environments.

(Berihu *et al*, 2014) Tried to provide overall picture of the MSE sector by describing the existing policy support and identifying key factors affecting the success and/or failure of Micro and Small-scale Enterprises in Addis Ababa and five other major regional towns in Ethiopia in the title of “Identifying Key Success Factors and Constraints of Ethiopia’s MSE Development” by using An Exploratory Research. The target stakeholders considered in this diagnostic study at the regional level comprises MSE development bureaus, microfinance institutions, TVET Agencies, Trade and Industry Bureaus and individual MSEs. A research team from EDRI visited Addis Ababa and five other major regional cities - Mekelle, Bahir Dar, Adama, Hawasa and Dire Dawa and The key success factors tend to be personal qualities such as articulate vision or ambition and innate abilities, working experience in the formal sector as a factory employee or having worked in family businesses, managerial and entrepreneurial skills and higher equity in the invested money. Except for personal traits and qualities, many of the stated success factors can

be emulated through teaching and training. On the other hand, the key constraints include shortage and small size of credit, shortage of working and sales spaces, lack of rental machinery and stringent licensing requirements.

Other researchers (Fredu and Edris, 2016) study on Small and Medium Enterprise Access to Finance in Ethiopia: Synthesis of Demand and Supply by using primary data collected from 519 business firms drawn from the major towns in Ethiopia. Similarly, information for the supply side analysis was collected from 8 banks and 3 Micro Finance Institutions. The logit model is used to analyze determinants of firms' access to finance from formal financial institutions. Their results indicate that banks and MFIs engagement in financing SMEs in Ethiopia is limited. The demand side findings and analysis revealed that access to finance is significantly influenced by the age of the firm, firm's previous engagement with banks, the experience of the manager and whether firms are managed by the owner (owner-manager) or not. In a similar fashion, SMEs specific factors such as poor financial records of SMEs, lack of adequate collateral, SMEs poor management of risks, and informalities of SMEs are the major obstacles underlined by banks and MFIs to their engagement with SMEs. In general, young firms who do not have adequate managerial and operation experience and those with inadequate collateral are highly credit constrained.

A study conducted on Assessing Factors Affecting Transitional Development of Small Scale to Medium Scale Enterprise in Sebeta Town: Challenges, Opportunities, and Prospects by (Mekonnen, 2014) to investigate major internal and external challenges, opportunities, and prospects in transitional development of Small Scale to medium scale enterprise. The study mainly used descriptive research with a mix of qualitative and quantitative tools to describe the existing situation. In his study both probability and non-probability sampling design were used to get information about the larger study of population and from The total population of the study is 1525 enterprises which include manufacturing (178), construction (40), Service (119), Urban Agriculture (58) and trade (118) and questionnaire from a sample of 358 operators and face-to-face interviews were conducted with 5 officials of MSEs stakeholder's in Oromia region and Sebeta town. The outcome of study indicates that the main problems are implementation problems related to government bodies at each level, inadequate finance.

2.2.4. Empirical Review of Quantitative Research Approach

However, most of the researchers focus on macroeconomic variables that affect the profitability of SMEs and used descriptive analysis method by applying qualitative research approach. Although, some researchers tried to determine the determinants of profitability and growth of SMEs by using quantitative research approach and analyzed through multiple panel regression analysis.

According to (Fatoki *et al*, 2010) study, the impact of the usage of debt on the profitability of small and medium enterprises in the Buffalo city municipality, South Africa analyzed through an estimated multiple regression results indicated that the usage of debt has a significantly negative impact on the profitability of SMEs. Another researcher (Kebewar, 2013) his empirical study in the effect of debt on profitability showed that the debt affects negatively the profitability, not only linearly, but also, in a non-linear (concave) way. However, while analyzing according to different size classes (VSEs, SMEs, and LEs); he fined that the linear negative effect becomes larger only in small and medium-sized enterprises (SMEs).

(Mirie and Edwin, 2015) In their research, the effect of capital structure on the financial Performance of small and medium enterprises in Thika sub-county, Kenya by using multiple linear regression results on 40 SMEs showed that there was no significant effect of capital structure, fixed asset turnover and asset tangibility on the financial performance of SMEs in Thika sub-county, Kenya. A study conducted by (Pouraghajan and Esfandiar, 2012) the relationship between capital structure and SMEs financial performance evaluation measures and return on assets ratio (ROA) used to measure the financial performance of enterprises. Results suggest that there is a significant negative relationship between debt ratio and financial performance of SMEs, and a significant positive relationship between fixed asset turnover, firm size, asset tangibility ratio, and growth opportunities with financial performance measures.

A study conducted by (Ombworo, 2014) on the effect of liquidity on the profitability of small and medium-sized enterprises in Kenya to establish the relationship between liquidity and profitability on SMEs in Kenya. To determine the relationship between liquidity/working capital management and profitability of the selected SMEs, the study used two types of data analysis techniques, i.e. descriptive and quantitative. The study findings conclude that liquidity has a positive but insignificant effect on profitability. It also concludes that leverage had a positive but

insignificant effect on performance, thus leverage does not affect the profitability of SMEs in Kenya. The findings also conclude that growth, as well as the size of firm, has a positive but insignificant effect on profitability and thus these do not affect their profitability. (Dedunu, 2017) On his study, working capital management impact on SMEs profitability result shows a negative relationship between Firm Leverage and Current Ratio with the SMEs profitability and Sales Growth shows a positive relationship with the return on assets. Finally, the study shows a negative relationship between overall working capital management and SMEs profitability.

The research conducted on the impact of working capital management on the profitability of SMEs in textile sector of Pakistan by (Sumaira and Javaria, 2013) results of the regression analysis concluded that Aggressiveness of working capital management policies is negatively associated with profitability. Moreover, liquidity and size of the firm have a positive relationship with profitability whereas debt ratio is negatively correlated with profitability. According to (Alexandru and Radu, 2014) on the title of “The Financial factors that Influence the Profitability of SMEs” by using OLS (ordinary least squares) that data collected from The number of companies analyzed was originally 50 and finally after successive eliminations, the database contained only 35 small and medium enterprises from Romania companies for the period 2009-2012. Their study results showed that managerial decisions on investment can influence decisively the profitability of SMEs especially in a period of economic instability. From an economic point of view, financial returns are positively influenced by the turnover and interest coverage and negatively influence by the leverage and the share of fixed assets in total assets, because a high value of it can mean a high cost of debt and therefore higher interest rates and an increase of ROIC.

In a study by (Radhe and Pratikshya, 2017) using the regression model estimated to test the significance and effect of capital adequacy and cost income ratio on the performance of Nepalese commercial banks. The study shows that there is a negative relationship capital adequacy, cost income ratio, equity capital to total assets ratio and liquidity ratio with return on assets. This indicates that increase in capital adequacy ratio, cost income ratio, equity capital to total assets ratio and liquidity ratio leads to increase in return on assets. This also agreed with (Almazari, Capital Adequacy, Cost Income Ratio and the Performance of Saudi Banks, 2013) Capital Adequacy, Cost Income Ratio and the Performance of Saudi Banks (2007-2011). The results of

analyzing the data based on the implementation of linear regression technique reveal that Saudi banks efficiency as measured by the cost-income ratio is negatively related to bank profitability.

2.2.5. Summary of Empirical Findings and Literature Gap

According to the above researchers, the business of Small and Medium enterprises could be affected by numerous and difference of determining factors. In addition to the above studies, Ethiopian researchers also studied in similar areas. A study conducted by (Biru, 2014), (Mulugeta, 2010), (Mekonnen, 2014), (Berihu *et al*, 2014) and (Zemenu and Mohammed, 2014) conducted on Factors Affecting the Performance and growth of Micro, Small and Medium Enterprises in their business activities by applying descriptive research design. According to the analysis, the researchers noted that shortage of working and sales spaces, lack of rental machinery and stringent licensing requirements. intensive competition, inadequate credit facility, starting a business without conducting a survey, inappropriate tax imposition, lack of business training, the absence of appropriate technology, are the top challenges that micro and small enterprises. Among the five sectors (as categorized by the MSE agency), the service sector is the most unstable sector. On the other hand manufacturing sector is the most sustainable.

(Admasu, 2012) And (Fredu and Edris, 2016) argues that inadequate finance, lack of working premises, marketing problems, inadequate infrastructures, poor management practices, technological, entrepreneurial and politico-legal problems including bureaucratic bottlenecks system. In a similar fashion, SMEs specific factors such as poor financial records of SMEs, lack of adequate collateral, SMEs poor management of risks, and informalities of SMEs are the major obstacles underlined by banks and MFIs to their engagement with SMEs. In general, young firms who do not have adequate managerial and operation experience and those with inadequate collateral are highly credit constrained.

Previous researchers were conducted in the area of factors affecting profitability and growth of SMEs has come out with mixed findings, though the context in terms of nature of businesses and location of research differs. For example, (Kebewar, 2013)and (Fatoki *et al*, 2010) reported that the usage of debt has a significantly negative impact on the profitability of SMEs in France and South Africa respectively. A study conducted by (Pouraghajan and Esfandiar, 2012) found that there is a significant positive relationship between fixed asset turnover and financial performance

of SMEs in Tehran. Similarly, (Mirie and Edwin, 2015) revers result showed that there was no significant effect of fixed asset turnover and asset tangibility on the financial performance of SMEs in Kenya. However, (Ombworo, 2014) the study findings conclude that liquidity has a positive but insignificant effect on profitability. It also concludes that leverage had a positive but insignificant effect on performance, thus leverage does not affect the profitability of SMEs in Kenya.

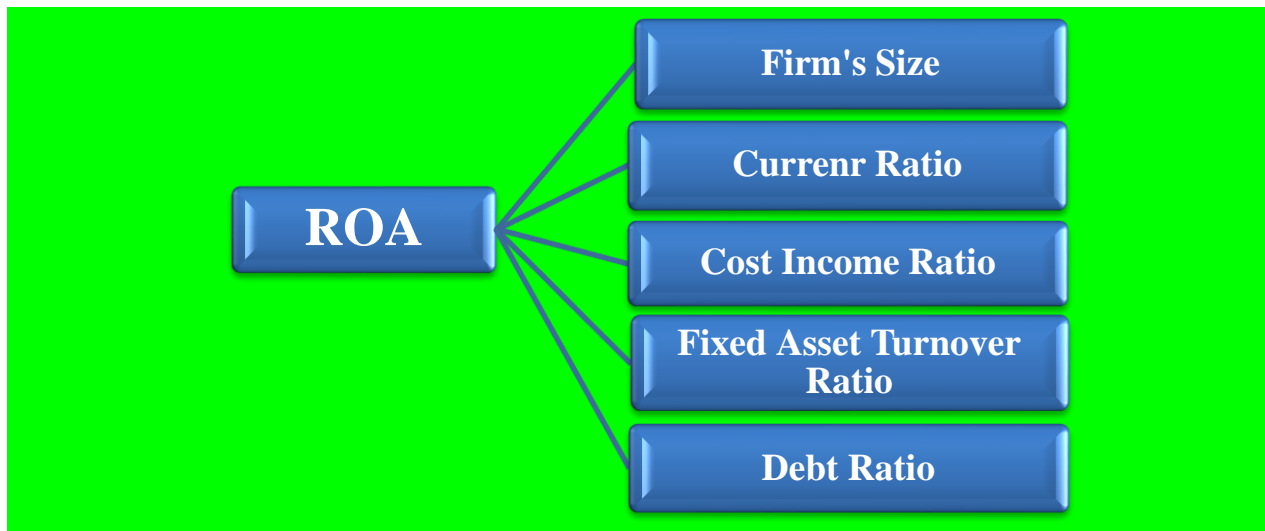
Further, (Dedunu, 2017) the research result shows a negative relationship between Firm Leverage and Current Ratio with the SMEs profitability and Sales Growth shows a positive relationship with the return on assets. Moreover (Sumaira and Javaria, 2013) found that liquidity and size of the firm have positive relation profitability whereas debt ratio is negatively correlated with profitability. However, most of the researchers focus on SMEs of marketing problems, inadequate infrastructures, technological, entrepreneurial and politico-legal problems including bureaucratic system especially access to finance by SMEs. The main reasons for credit access are the structure of the financial sector, collateral requirements and lack of strong support on SMEs. Similarly, like the above macroeconomic factors, Ethiopian researchers did not attempt to address by determine the effect of Small and Medium Enterprises financial activities such as firm's size, liquidity management, operating efficiency, fixed asset management and leverage effects on the overall profitability of Ethiopian SMEs. Therefore under this study, the researcher tried to address this issue. In line with this, the following section tried to focus on discussing selected dependent and independent variables both used in this study, and this also confirmed by (Rosli, 2011) that firm-specific (internal) factors are more important than any other factors in determining firm's profitability.

2.2.6. The Conceptual Framework

Conceptual framework means the concept that relates to one another and can be used to explain the research problem. Since business performance is influenced by both internal and contextual factors, operators need to understand what influences that affecting business to reach peak performance. In this study, major profitability measurement return on asset (ROA) was used to measure the profitability of SMEs. This was mainly because of the following two reasons. First, as the pilot study clearly indicates these SMEs are more focusing on profitability than other modes of performance measurement for their business activity Second, as recommended by (Rami and Ahmed,

2007) a profit has been widely adopted by most researchers and practitioners in business performance models. Under this study the relationship between dependent variable (ROA) and explanatory variables (Size, Current Ratio, Cost Income Ratio, Fixed Asset Turnover Ratio and Debt Ratio) can be expressed and shown as follows;

Figure 2.2: The conceptual framework or model of the study



Source: - The researcher's compilation from a theoretical and empirical review

The researcher tried to clearly notify the firm-specific (internal) factors that affect profitability and growth of SMEs on the above figure 2.2. Based on the researcher focusing area of internal factors, the above variables are selected from both theoretical and empirical reviews. For instance, ROA was used by (Pouraghajan and Esfandiar, 2012), (Nzimbi, 2012), (Ombworo, 2014), (Alexandru and Radu, 2014) and (Farah and Nina, 2016) as a dependent variable to measure the profitability of SMEs. Both CR and DR are used as independent variables by (Nzimbi, 2012), (Sumaira and Javaria, 2013) and (Ombworo, 2014). Size used by (Pouraghajan and Esfandiar, 2012) and (Farah and Nina, 2016) as explanatory variable whereas CIR used as firm-specific factor by (Almazari, 2013) and (Radhe and Pratikshya, 2017), FATR also noted by (Bringham and Ehrhardt, 2011) used to measure the effect of fixed assets on firm's performance.

CHAPTER THREE

RESEARCH METHODOLOGY

To analyze the potential impacts of factors on profitability of SMEs, this study made use of a research methodology. This section provides an overview of the study's research approach. The chapter discusses procedures and activities that undertaken in this study, namely the study's research design, Source of data and collection methods, Population and Sampling Design, Model specification, data processing and analysis and Model assumption tests.

3.1. Research Design

Research design is the blueprint for fulfilling research objectives and answering research questions. In other words, it is a master plan specifying the methods and procedures for collecting and analyzing the needed information. It ensures that the study would be relevant to the problem and that it uses economical procedures. (Kothari, 2004)discusses three types of research design, the first one is Descriptive research studies are those studies which are concerned with describing the characteristics of a particular individual, or of a group, whereas diagnostic research studies determine the frequency with which something occurs or its association with something else. Secondly, Exploratory research studies those are the major emphasis in such studies is on the discovery of new ideas and insights and the last one is Hypothesis-testing research studies (generally known as explanatory/experimental studies) are those where the researcher tests the hypotheses of causal relationships between variables. Therefore in this study explanatory research design were used to determining how selected explanatory variables affect the profitability of SMEs particularly Woreta town. Because of this study emphasis to determine the cause and effect relationship of selected variables, the researcher applied quantitative research approach and inferential analysis.

3.2. Source of Data and Collection Methods

The study was focus on only the identification of key determinants of financial performance issues such as firm's size, liquidity, efficiency, asset management and leverage on effects on profitability of selected SMEs in Woreta town by analyzing the financial statements (both statement of profit and loss and statement of financial position) that reported to office Woreta

town revenue. Due to homogeneity and accessibility of relevant data the researcher chooses Woreta town from three city's administrations in South Gondar as a case study.

(Bringham and Houston) noted that analysis of financial statements can highlight a company's strengths and shortcomings, and this information used by management and other to evaluate the performance and to forecast future results. Therefore this study employed secondary sources of data collection. Because of this, the researcher employed a quantitative research approach and used panel regression to investigate and analysis the factors that affect the profitability of SMEs in South Gondar, specifically Woreta town because (Brooks, 2008) noted that a panel of data embody information across both time and space. Importantly, a panel keeps the same individuals or objects (henceforward call this 'entities') and measures some quantity about them over time from tangible and real data.

3.3. Population and Sampling Design

To achieve the study objectives, the researcher were gather necessary and sufficient data from town's revenue office about selected SMEs those operated their business in Woreta town in the last five years from 2013-2017 was used to determine the most recent factors that affect profitability of SMEs in the area of study . To include as small and medium enterprise, the definition of Federal Micro and Small Enterprises Development Agency are considered. Initially as the similar characteristics' of SMEs on small towns especially in South Gondar, the researcher selected Woreta town for this case study from Three (3) city administrations in South Gondar (Woreta, Debre Tabor and Addis Zemen). Therefore as the researcher preferred to apply quantitative research approach the target population of this study was all 82 business enterprises which are currently maintained their book of records and submitting required financial statements to the authorized revenue office. In line with this, to get sample size non-probability purposive sampling technique were used. Because this sampling technique enhances the researcher to get data that fits to the particular criteria by using various methods. Because of the enterprises potential to be including in sample frame depends on their business life, the researcher was selected all Twelve (12) SMEs as sample size those operated business activities for the last five years and above in Woreta town.

3.4. Explanation of Variables

3.4.1. Return on Assets (ROA)

This ratio is one of the most important measures of profitability. ROA is described as an appraisal of the ability of a firm to earn profit from its asset. It shows the effectiveness of firm's total asset management to obtain more revenue. It can be said that this variable is an indicator used to measure the company's performance (Moaveni, 2014). Readers of financial statements can gather information by examining relationships between items on the statements and identifying trends in these relationships. The relationships are expressed numerically in ratios and percentages, and trends are identified through comparative analysis. (Donald *et al*, 2014) stated that Return on Assets measures overall profitability of assets in business enterprise activities. This ratio calculated;

$$\text{ROA} = \frac{\text{Net income}}{\text{Total assets}}$$

(Alexandru and Radu, 2014) Return on invested capital measured the efficiency of resource allocation and also the quality of management in SMEs. It is an indicator to quantify the effectiveness of the company's assets. The entrepreneurs and managers measure the total performance of an SME by dividing total income by total assets. Because income is measured as the net profit and interest expense and can take into account the entire profitability of the company's capital structure function. It is better to use net income, adding interest, as this would show the return on all assets of the company, not just capital investment by the shareholders.

This indicator highlights the performance of using the total assets of a business, namely of the capital invested in order to achieve this performance. Economic profitability level should allow compensation of shareholders and creditors, in accordance with the risk assumed. (Alexandru and Radu, 2014) Also, ROIC is defined as measuring the efficiency in generating profits from its assets before the effects of financing. Earnings before interest and taxes (EBIT) are the accounting revenue of all operating activities.

3.4.2. Independent Variables

According to (Higgins, 2007) profitability influenced by; (1) the earnings squeezed out of each dollar of sales, or the profit margin; (2) the sales generated from each dollar of assets employed, or the asset turnover; and (3) the amount of equity used to finance the assets, or the financial leverage.! With few exceptions, whatever management does to increase these ratios increases

profitability. Some of the internal financial activities that affect the profitability of firms are discussed as follow:

Firm Size

The total value of total assets is used to measure the firm's size. This factor is always shown as the logarithm in the analysis. The impact of this variable on profitability is complex. On one hand, larger firms have more ability to raise their product than the smaller one. It means that these firms can keep the risk as low as possible which leads to higher profitability. On the other hand, large firms face more expenses, such as the agency costs, costs related to managing and bureaucratic process costs (Kevin and Adrienne, 2006). These expenses affect the profitability and reduce it.

Liquidity (Current Ratio)

As noted, one determinant of a company's debt capacity is the liquidity of its assets. An asset is liquid if it can be readily converted to cash, while a liability is liquid if it must be repaid in the near future. (Higgins, 2007) The current ratio compares the assets that will turn into cash within the year to the liabilities that must be paid within the year. A company with a low current ratio lacks liquidity in the sense that it cannot reduce its current assets for cash to meet maturing obligations.

$$\text{Current Ratio} = \frac{\text{Current Asset}}{\text{Current liability}}$$

Operating Efficiency (Cost Income Ratio)

(Moaveni, 2014) It is the main key performance index which defines the relationship between operating the efficiency and profitability. This financial ratio gives the investors a view of changing costs compared to income. Rising in this factor has a negative impact on profitability. Actually, higher cost causes this change in cost-to-income ratio and it means that cost of the firm increase at a higher rate than income. It is a well-known theory that companies can gain from economies of scale or scale of efficiency; that is as companies grow, they will be able to comparatively reduce the costs and achieve higher profitability. Therefore, the variable of "Cost-Income Ratio" has been added to the model of this study in order to see if economies of scale or scale of efficiency do matter for the profitability and growth of Ethiopian SMEs.

$$\text{Cost Income Ratio} = \frac{\text{Total operating expense}}{\text{Total revenue}}$$

Asset Management (Fixed Asset Turnover Ratio)

(Donald, Jerry, and Terry, 2014) Stated that Asset turnover measures how efficiently fixed assets are used to generate sales and maximizing revenues from business activities. The nature of a company's products and its competitive strategy strongly influence asset turnover that measures the sales generated per dollar of fixed assets. Some newcomers to finance believe fixed assets are a good thing: the more the better. (Higgins, 2007) The reality is just the opposite: Unless a company is about to go out of business, its value is in the income stream it generates, and its fixed assets are simply a necessary means to this end. Indeed, the ideal company would be one that produced income without any assets; then no investment would be required, and returns would be infinite.

$$\text{Fixed Asset Turnover Ratio} = \frac{\text{Net sales}}{\text{Total fixed assets}}$$

Leverage (Debt-to-assets ratio)

It is a financial ratio that indicates the percentages of a firm's assets are financed with debt. The research conducted by (Ana and Machado, 2012) concluded that there is a negative relationship between the degree of leverage and SMEs' profitability and a positive one with their growth. Unlike the profit margin and the asset turnover ratio, where more is generally preferred to less, financial leverage is not something management necessarily wants to maximize, even when doing so increases ROE. (Higgins, 2007) Instead, the challenge of financial leverage is to strike a prudent balance between the benefits and costs of debt financing, it is sufficient to recognize that more leverage is not necessarily preferred to less and that while companies have considerable latitude in their choice of how much financial leverage to employ. The most common measures of financial leverage compare the book value of a company's liabilities to the book value of its assets or equity. This gives rise to the debt-to-assets ratio, calculated as

$$\text{Debt Ratio (Debt-to-assets ratio)} = \frac{\text{Total Liabilities}}{\text{Total Asset}}$$

Table 3.1: Summary of Variables, Measurement, notation and Expected Sign

<i>Variables</i>	<i>Measurement</i>	<i>Notation</i>	
Dependent Variable:			
Return on Asset	Net income/Total assets	ROA	
Independent Variables:			
<i>Variables</i>	<i>Measurement</i>	<i>Notation</i>	<i>Expected Sign</i>
<i>Firm Size</i>	Logarithm of firm's total asset	Log SIZE	-
<i>Liquidity (current ratio)</i>	Current asset/current liability	CR	-
<i>Operating Efficiency (cost-income ratio)</i>	Operating expense/Total revenue	CIR	-
<i>Asset management (fixed asset turnover ratio)</i>	Net sales/ Total fixed assets	FATR	+
<i>Leverage(debt ratio)</i>	Total Liabilities/Total Asset	DR	-

3.5. Model Specification

In very general terms, regression is concerned with describing and evaluating the relationship between a given variable and one or more other variables. More specifically, regression is an attempt to explain movements in a variable by reference to movements in one or more other variables (Brooks, 2008). To achieve the objectives of the study the researcher used Ordinary Least Square (OLS) method to investigate and analyze the factors that affect the profitability of SMEs. This method is more effective when there is no Multicollinearity problem between the variables (Moaveni, 2014). The method of OLS is extensively used in regression analysis primarily because it is initiative appealing and mathematically much simpler than any other econometric technique (Gujarati, 2004).

So that, in order to develop strong, robust and reliable models that capture the relationship between explanatory variables with the dependent variable, OLS were used as the estimation econometric technique. Therefore the p-value of explanatory variables was used to test the developed hypotheses at 5% significance level. The regressions model for the dependent variable ROA is presented in the equation below. In this study, the regression was run by using E-views 8 econometric software. Finally, 5 years financial statements of 12 SMEs (total observation $12*5=60$) was used to determine the effects of explanatory variables on profitability of SMEs. The regression model employed in the study presented as follows;

ROA = f (Firm's Size, Liquidity, Operating Efficiency, Asset management, Leverage)

Regression Model:

$$ROA_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 CR_{it} + \beta_3 CIR_{it} + \beta_4 FATR_{it} + \beta_5 DR_{it} + \mu_{it}$$

Where:

ROA_{it} = return on asset ratio of firm *i* at time *t*

β₀ = is an intercept of the model (a constant which would be equal to the mean if all slope coefficients are 0).

SIZE_{it} = logarithm of the size of firm *i* at time *t*

CR_{it} = current ratio of firm *i* at time *t*

CIR_{it} = cost-income ratio of firm *i* at time *t*

FATR_{it} = fixed asset turnover ratio of firm *i* at time *t*

DR_{it} = debt ratio of firm *i* at time *t*

μ_{it} = demonstrates the error term in the model

3.6. Methods of Data Analysis

To determine and analysis the relevance cause and effect relationship between the explanatory variables and dependent variable multiple regression analysis were used to analyze the data under inferential analysis because (Kothari, 2004) noted that multiple regression analysis is adopted when the researcher has one dependent variable which is presumed to be a function of two or more independent variable. Because of this, multiple regression analysis was used to assess and determine the effect of Five (5) selected explanatory variables on the dependent variable (ROA) that is important to know the internal factors of profitability.

The reasons behind to choose panel data was first, and perhaps most importantly, we can address a broader range of issues and tackle more complex problems with panel data that would be possible with pure time-series or pure cross-sectional data alone. Secondly, by combining cross-sectional and time series data, one can increase the number of degrees of freedom and by combining the data in this way can also help to mitigate problems of multicollinearity that may arise if time series are modeled individually. Finally, by structuring the model in an appropriate way, we can remove the impact of certain forms of omitted variables bias in regression results (Brooks, 2008) therefore, multiple panel linear regression analysis was also used to test the hypothesis and to explain cause and effect relationship between firm's size, current ratio, cost-

income ratio, asset turnover ratio, leverage with profitability (ROA) by using Eviews 8 econometric software package.

3.7. Model Assumption Tests

To check the appropriateness of model used in this study, the researcher was used diagnostics tests to test the relationships between error terms are constant or not, normally distribution of residuals and explanatory variables by using Eviews 8 econometric software package. The methods of model assumption tests those were used in this study are as follows;

↳ Test for Heteroscedasticity

It has been assumed thus far that the variance of the errors is constant, σ^2 -- this is known as the assumption of homoscedasticity. If the errors do not have a constant variance, they are said to be heteroscedastic. A popular test is White's (1980) general test for heteroscedasticity. The test is particularly useful because it makes few assumptions about the likely form of the heteroscedasticity (Brooks, 2008). (Gujarati, 2004) One of the important assumptions of the classical linear regression model is that the variance of each disturbance term u_i , conditional on the chosen values of the explanatory variables, is some constant number equal to σ^2 . This is the assumption of homoscedasticity, or equal (homo) spread (scedasticity), that is, equal variance.

↳ Test for Autocorrelation

(Brooks, 2008) Noted that the CLRM's disturbance terms is that the covariance between the error terms over time (or cross-sectionally, for that type of data) is zero. In other words, it is assumed that the errors are uncorrelated with one another. If the errors are not uncorrelated with one another, it would be stated that they are 'autocorrelated' or that they are 'serially correlated'. A test of this assumption is therefore required. The simplest test is due to Durbin and Watson (1951). Durbin--Watson (DW) is a test for first-order autocorrelation -- i.e. it tests only for a relationship between an error and its immediately previous value. One way to motivate the test and to interpret the test statistic would be in the context of a regression of the time t error on its previous value (Brooks, 2008). But in this study, Breusch-Godfrey Serial Correlation LM test was employed to test for the presence of second-order autocorrelation.

↳ **Test for Multicollinearity**

According to (Gujarati, 2004) one of the assumptions of the classical linear regression model is that there is no multicollinearity among the explanatory variables, the X's. Broadly interpreted, multicollinearity refers to the situation where there is either an exact or approximately exact linear relationship among the X variables. An implicit assumption that is made when using the OLS estimation method is that the explanatory variables are not correlated with one another. If there is no relationship between the explanatory variables, they would be said to be orthogonal to one another. If the explanatory variables were orthogonal to one another, adding or removing a variable from a regression equation would not cause the values of the coefficients on the other variables to change (Brooks, 2008).

↳ **Test for Normality**

As discussed in (Brooks, 2008) one of the most commonly applied tests for normality is the Bera—Jarque (hereafter BJ) test. BJ (1981) uses the property of a normally distributed random variable that the entire distribution is characterized by the first two moments -- the mean and the variance. The standardized third and fourth moments of a distribution are known as its skewness and kurtosis. Skewness measures the extent to which a distribution is not symmetric about its mean value and kurtosis measures how fat the tails of the distribution are. A normal distribution is not skewed and is defined to have a coefficient of kurtosis of 3. It is possible to define a coefficient of excess kurtosis, equal to the coefficient of kurtosis minus 3; a normal distribution will thus have a coefficient of excess kurtosis of zero.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.1. INTRODUCTION

This chapter deals with the data presentation, interpretation, and analysis of the study. The data analysis was made in harmony with the specific objectives where patterns were investigated, interpreted and inferences drawn on them. This analysis was used to determine the relevance relationship between the variables by apply quantitative research approach to achieve the research objectives. The study was sought to investigate the factors affecting profitability of small and medium enterprises in South Gondar, specifically Woreta town as a case study. The data was gathered exclusively from secondary sources (statement of profit and loss and statement of financial position) as the research instrument on an annual basis between the period of 2013 to 2017 (2005-2009 E.C). This chapter presented the descriptive, correlation and regression analysis results and the researcher tried to show the financial factors that determine the performance of SMEs.

4.2. Descriptive statistics

Table 4.1: presents a summary of the descriptive statistics of the dependent and independent variables for twelve(12) SMEs in Woreta town for a period of Five (5) years from 2013-2017 with a total of 60 observations. Key figures, including mean, maximum, minimum and standard deviation value are reported.

Table 4.1: Descriptive Statistics Result

Result	Dependent Variable	Independent Variable				
		Log SIZE	CR	CIR	FATR	DR
Mean	0.262092	5.557059	24.10226	1.022665	60.25449	0.352629
Median	0.213274	5.510444	5.822023	0.910906	19.07763	0.180697
Maximum	0.981809	6.66251	432.7279	9.123402	691.9298	2.101277
Minimum	-0.003335	4.795765	0.420324	0.549454	0.590813	0.003206
Std. Dev.	0.203573	0.436274	66.83481	1.066853	107.0208	0.45568
Observations	60	60	60	60	60	60

Source: - The annual report of sample SMEs computed using E-views 8

Return on Asset (ROA):-It is measured using the ratio of the net income divided by total assets. (Higgins, 2007) ROA is a basic measure of the efficiency with which a company allocates and manages its resources. The reason behind to used ROA than ROE as an indicator of profitability measurement is ROA described as an appraisal of the ability of a firm to earn profit from its asset. It shows the effectiveness of firm's total asset management to obtain more revenue. It can be said that this variable is an indicator used to measure the company's performance (Moaveni, 2014). As shown in table 4.1 above, on average SMEs in this study sample have a return on assets (ROA) of 26.2% with minimum of -0.33% and maximum of 98.18% for the period 2013 to 2017, it means that the most profitable SME among the sample earned 98.18 cents of net income from a single birr of asset investment and the maximum losses incurred by some of the samples SMEs are a loss of 0.33 cents on each birr of asset investment. And also most of the remaining SMEs from the sample earned an average of 26.2 cents from each birr invested by the SME. The standard deviation 20.35% showed that there was higher variability of ROA on SMEs in the data for the profitability measures. The result of this study concluded that SMEs should be an emphasis on their resources utilization and maximizing profit to ensure their survival and growth.

SMEs size measured by the natural logarithm of a total asset is a proxy for asset size of SMEs having a mean value is 5.55. The standard deviation from the mean is 0.43, maximum of 6.66 and minimum of 4.79. This showed that SMEs which are included in this research has a low variation in their total asset. Firm's current ratio is measured by total current assets divided by total current liabilities. The average current ratio as the measurement of liquidity of Woreta town SMEs is 24.1 and divert from this mean value in both sides by 66.83. The lowest and highest current ratios for SMEs are 0.42 and 432.72 respectively. This result showed that to pay 1 birr of CL most of SMEs had 24 birr and there is very big variation between SMEs in terms of liquidity. The mean of cost income ratio is 1.02 with a standard deviation of 1.06 that is measured by total operating expenses divided by total operating revenues which were used to measure operating efficiency of SMEs. This study result showed that most of SMEs are weak the way they manage their liquidity which means they need to make relevant correction actions.

Fixed asset turnover ratio that is used to evaluating firm's asset management is measured by net income divided by total fixed assets has a mean value of 66.25 with a standard deviation of

107.02. As shown by the above table the lowest and highest value of this ratio is 691.92 and 0.59 respectively. This result shows that there is very big variation between SMEs in relating to fixed asset management. On the other hand, application of debit ratio (DR) that is measured by total liability divided by total asset in the capital structure of sample enterprises is in a range between 0.003 and 2.1 which its mean is equal to 0.35 and this means that on average around 35 percent of financial resources needed for SMEs are supplied from debt, this implies that the application of debt policies in capital structure of SMEs is not too much important and there were low variation in their debt ratio as standard deviation of 0.45 which means they should give more attention on their leverage decision

4.3. Correlation Analysis of Variables

The correlation between two variables measures the *degree of linear association* between them. If it is stated that y and x are correlated, it means that y and x are being treated in a completely symmetrical way. Thus, it is not implied that changes in x cause changes in y , or indeed that changes in y cause changes in x rather, it is simply stated that there is evidence for a linear relationship between the two variables and that movements in the two are on average related to an extent given by the correlation coefficient. A correlation coefficient must lie between -1 (i.e. perfect negative relationship) and $+1$ (i.e. perfect positive relationship) by definition (Brooks, 2008).

Table 4.2: Correlation Analysis of Variables

	ROA	SIZE	CR	CIR	FATR	DR
ROA	1.000000					
SIZE	-0.66633	1.000000				
CR	-0.26092	0.06362	1.000000			
CIR	-0.434306	-0.08583	-0.03085	1.000000		
FATR	0.244267	-0.22887	0.091722	-0.07186	1.000000	
DR	-0.066356	-0.21708	0.092327	0.275651	0.097081	1.000000

Source: - The annual report of sample SMEs computed using E-views 8

The above correlation result in Table 4.2 shows firm's size, current ratio and cost income ratio had negative correlation with return on asset for measurement of Small and Medium Enterprises performance. It refers that when these variables increases, performance of SMEs in the sample

will be go down. However, fixed asset turnover ratio and debt ratio had positive correlation with return on asset which indicates that while these variables increase, at the same time profitability of Small and Medium Enterprises will be increased. The coefficient estimate of correlation in the above table shown that -0.66633, -0.26092, -0.434306 and -0.066356 for firm's size, current ratio, cost income ratio and debt ratio respectively. This implies that these variables are negatively correlated with return on asset. However, fixed asset turnover ratio has 0.244267 coefficient value which is positive correlation with return on asset. Finally, in order to determine the strength of the relationship between independent and dependent variables the result of correlation coefficients this study indicates that there is a strong negative relationship in ROA with firm's size and CIR whereas DR had weak and negative correlation with profitability indicator ROA.

4.4. Regression Model Assumption Tests

To make data available for reliable results and valid hypothesis testing, the test of assumption of regression model is required. Accordingly, the study has gone through the most critical regression diagnostic tests consisting of autocorrelation, multicollinearity, heteroscedasticity and normality tests accordingly. (Brooks, 2008) Recall that five assumptions are required in relating to the classical linear regression model (CLRM). These were required to show that the estimation technique, ordinary least squares (OLS), had a number of desirable properties, and also so that hypothesis tests regarding the coefficient estimates could validly be conducted. Specifically, it was assumed that:

- (1) $E (ut) = 0$
- (2) $\text{Var} (ut) = \sigma^2 < \infty$
- (3) $\text{Cov} (ui, u j) = 0$
- (4) $\text{Cov} (ut, xt) = 0$
- (5) $ut \sim N(0, \sigma^2)$

Test 1:- The Error have Zero Mean $E (ut) = 0$

The first assumption required is that the average value of the errors is zero. In fact, if a constant term is included in the regression equation, this assumption will never be violated (Brooks, 2008). This research passed the first assumption of regression model test since the inclusion of constant term (β).

Test 2:- Heteroskedasticity assumption for (var (ut) = $\sigma^2 < \infty$)

(Brooks, 2008) It has been assumed thus far that the variance of the errors is constant, σ^2 -- this is known as the assumption of homoscedasticity. If the errors do not have a constant variance, they are said to be heteroscedastic. There are two most used tests to detect the Heteroscedasticity problem, Breusch-Pagan-Goldfrey Test, and Whites. In this study, the popular white test was employed to test for the presence of heteroscedasticity. For purpose of assumption test the following hypothesis was formulated;

H0: The variance of the error is homoscedasticity and

H1: The variance of the error is heteroscedasticity

Table 4.3 Heteroskedasticity Test for ROA Model

Heteroskedasticity Test: White

F-statistic	1.742568	Prob. F(5,54)	0.1406
Obs*R-squared	8.335940	Prob. Chi-Square(5)	0.1387
Scaled explained SS	9.119307	Prob. Chi-Square(5)	0.1044

Source: - From annual report of sample bank computed using E-views 8

As shown from the above table 4.3, both the F-statistic and Chi-Square versions of the test statistic gave the same conclusion that there is no proof for the presence of heteroscedasticity with the p-value of 0.1406 and 0.1387 (14 and 13 percent) respectively. In this study model developed, the p-values is significantly in excess of 0.05. The third version of the test statistic, Scaled explained SS also gave the same conclusion that there is no evidence for the presence of heteroscedasticity problem when the p-value was considerably in excess of 0.05. Therefore, the null hypothesis that the variance of the errors is constant (homoscedasticity) should not be rejected.

Test 3:- Autocorrelation assumption test $Cov(u_i, u_j) = 0$ for $i = j$

(Brooks, 2008) Noted that the CLRM's disturbance terms are that the covariance between the error terms over time (or cross-sectionally, for that type of data) is zero. In other words, it is assumed that the errors are uncorrelated with one another. If the errors are not uncorrelated with one another, it would be stated that they are 'autocorrelated' or that they are 'serially correlated'. A test of this assumption is therefore required. The simplest test is due to Durbin and Watson (1951). In this study, Breusch-Godfrey Serial Correlation LM test was employed to test for the presence of Autocorrelation for second-order autocorrelation -- i.e. it tests for a relationship between an error and its previous two period's value. For purpose of Autocorrelation assumption test the following hypothesis was formulated;

H0: The errors are uncorrelated with one another and

H1: The errors are correlated with one another

Table 4.4 Breusch-Godfrey Serial Correlation LM (Autocorrelation)

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.660801	Prob. F(2,52)	0.5207
Obs*R-squared	1.487129	Prob. Chi-Square(2)	0.4754

Source: - From annual report of sample bank computed using E-views 8

On the above table 4.4, both versions of the tests; F- statistic and R-squared version of the test indicate that the model ROA is the null hypothesis of no autocorrelation should not be rejected since the p-value is considerably in excess of 0.05. Therefore the p-values result for F- statistic and R-squared are 0.5207 and 0.4754 (52 and 47 percent) respectively enables that the conclusion from both versions of the test described that the null hypothesis of no autocorrelation is not rejected.

Test 4: Multicollinearity Test (The xt are Non-Stochastic); $Cov(ut, xt) = 0$

According to (Gujarati, 2004) one of the assumptions of the classical linear regression model is that there is no multicollinearity among the explanatory variables, the X's. Broadly interpreted,

multicollinearity refers to the situation where there is either an exact or approximately exact linear relationship among the X variables. Fortunately, it turns out that the OLS estimator is consistent and unbiased in the presence of stochastic regressors, provided that the regressors are not correlated with the error term of the estimated equation. However, a problem occurs when the explanatory variables are very highly (greater than 0.7) correlated with each other and this problem is known as multicollinearity (Brooks, 2008). To check this, the following test was made;

Table 4.5 Correlation Matrix for Test of Multicollinearity

	SIZE	CR	CIR	FATR	DR
SIZE	1.000000				
CR	0.063620	1.000000			
CIR	-0.085830	-0.030845	1.000000		
FATR	-0.228870	0.091722	-0.071858	1.000000	
DR	-0.217081	0.092327	0.275651	0.097081	1.000000

Source: - From annual report of sample bank computed using E-views 8

The method used in this study to test the existence of multicollinearity was by checking the correlation between the independent variables. The correlations between the independent variables are shown in table 4.5 above. All correlation results between independent variables are below 0.75 with the highest value is 0.27 between CIR and DR; which indicates that multicollinearity was not a problem for this study.

Test 5: Normality (the disturbances are normally distributed)

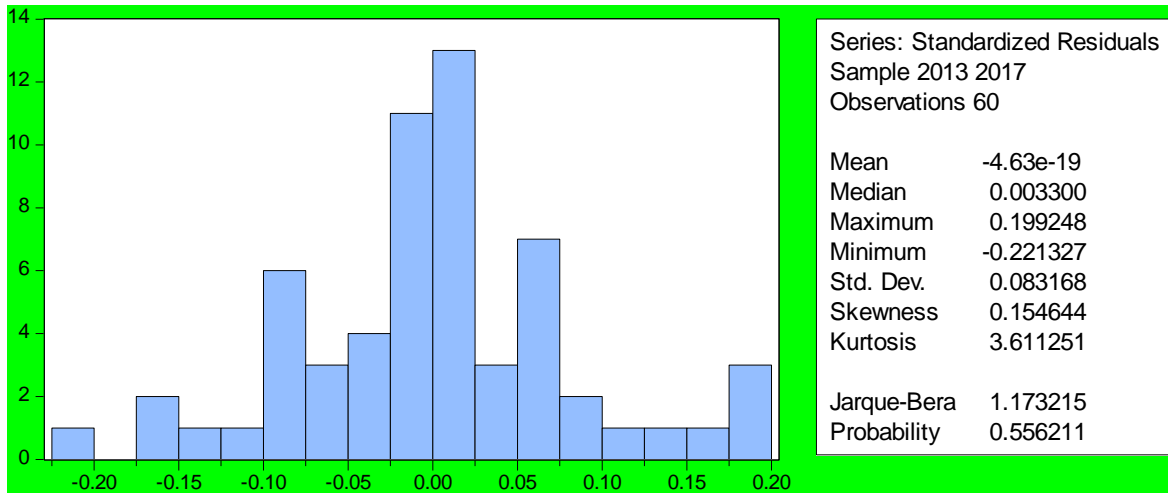
(Brooks, 2008) Noted that the normality assumption ($u_i \sim N(0, \sigma^2)$) is required in order to conduct single or joint hypothesis tests about the model parameters. One of the most commonly applied tests for normality is the Bera—Jarque (hereafter BJ) test. BJ (1981) uses the property of a normally distributed random variable that the entire distribution is characterized by the first two moments -- the mean and the variance. The standardized third and fourth moments of a distribution are known as its skewness and kurtosis. Skewness measures the extent to which a distribution is not symmetric about its mean value and kurtosis measures how fat the tails of the

distribution are. A normal distribution is not skewed and is defined to have a coefficient of kurtosis of 3. In addition to this If the BJ value is greater than 0.05, it's an indicator of the presence of normality. The hypothesis for the normality test was formulated as follow:

H0: Error term is normally distributed and

H1: Error term is not normally distributed

Figure 4.1 Normality Test Result



Source: - From annual report of sample bank computed using E-views 8

As shown in Figure 4.1 the coefficient of kurtosis in the regression model of this study has a value of (3.61) with a P-value of 0.55 for ROA. Therefore, we can conclude that there was no evidence for the presence of an abnormality in the data since the p-value is greater than 0.05. Thus, the null hypothesis that the data is normally distributed should not be rejected since the p-value was considerably in excess of 0.05 and the coefficient of kurtosis closer to 3

4.5. Model Selection (Random Effect versus Fixed Effect Models)

It is also necessary to determine whether the fixed effect or random effect approach is appropriate. The econometric model used to examine the firm's internal factors effect on the profitability of SMEs should be check either fixed-effects or random-effect is an appropriate panel data regression model. The choice between both approaches is done by running a Hausman test. To conduct a Hausman test the number of a cross section should be greater than the number of coefficients to be estimated. Accordingly, in this study the number of cross-section units was

Twelve and the number of time series data was Five which is the fixed effect model is more appropriate than the random effect model. To determine whether the fixed effects are necessary or not this study run the Hausman specification test as recommended by (Brooks, 2008) and (Gujarati, 2004). The hypothesis for the model selection test was formulated as follow;

H₀: Random effects model is appropriate.

H₁: Fixed effects model is appropriate.

Table 4.6 Hausman Test Result

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	23.679938	5	0.0003

Source: - From annual report of sample bank computed using E-views 8

As shown in Table 4.6, the Hausman specification test for this study has a p-value of 0.0003 for the regression models. This indicates that p-value is significant at 5% significant level and then the null hypothesis is rejected justifying as fixed effect model is appropriate for the given data set in this study.

4.6. Regression results

Regression analysis is almost certainly the most important tool at the panel data for quantitative research approach. In very general terms, regression is concerned with describing and evaluating the relationship between a given variable and one or more other variables. More specifically, regression is an attempt to explain movements in a variable by reference to movements in one or more other variables (Brooks, 2008). The first empirical model used in this study to determine internal factors that affect the profitability of Small and Medium Enterprises in South Gondar as a case in Woreta was:

$$ROA_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 CR_{it} + \beta_3 CIR_{it} + \beta_4 FATR_{it} + \beta_5 SDR_{it} + \mu_{it}$$

Table 4.7 Fixed effect panel model regression result

Dependent Variable: ROA
 Method: Panel Least Squares
 Sample: 2013 2017
 Periods included: 5
 Cross-sections included: 12
 Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.046749	0.369708	8.240959	-0.0000*
SIZE	-0.514315	0.067244	-7.648459	0.0000*
CR	-0.000281	0.000231	-1.216766	0.2303
CIR	-0.100146	0.015983	-6.265681	0.0000*
FATR	0.000553	0.000155	3.565107	0.0009*
DR	-0.157559	0.087585	-1.798929	0.0791**

Effects Specification			
Cross-section fixed (dummy variables)			
R-squared	0.833093	Mean dependent var	0.262092
Adjusted R-squared	0.770989	S.D. dependent var	0.203573
S.E. of regression	0.097420	Akaike info criterion	-1.586049
Sum squared resid	0.408098	Schwarz criterion	-0.992652
Log likelihood	64.58148	Hannan-Quinn criter.	-1.353939
F-statistic	13.41432	Durbin-Watson stat	2.606179
Prob(F-statistic)	0.000000		

Source: - From annual report of sample SMEs computed using E-views 8

N.B:- * and ** indicate that significant at 1% and 10% significance level respectively.

The result of the least square regression presented in table 4.7 indicates that, the adjusted R^2 , which measures how well the regression model explains the actual variation in the dependent variable has a value of 0.770989. This result reveals that 77% of the total variability of financial performance (profitability) of SMEs in area of this study is explained by the considered variables (explanatory variables; firm's size, current ratio, Cost income ratio, fixed asset turnover ratio and debt ratio) which lead to the conclusion that the selected explanatory variables provide good explanatory power. The remaining 23% of change was explained by other factors which are not included in the model which means the result showed that internal factors are more influential than external factors.

Furthermore, the *F-statistic* value of 13.41 with zero p-values to six decimal strengthened this conclusion depicting that the variables in the model are capable of explaining the variation of

profitability of SMEs measured by ROA rejecting none of the variables could explain it. In other words, the null hypothesis of the model was rejected at 1 percent significance level. Therefore, model variables are significant and the model adequately describes the data. According to the regression result in sample from table 4.7, both explanatory variables; the size of SMEs (SIZE), current ratio (CR), cost-income ratio (CIR) and fixed asset turnover ratio (FATR) have significant effects on performance (profitability) whereas current ratio (CR) and debt ratio (DT) had insignificant effect on the profitability of Small and Medium Enterprises of Woreta town. The above profitability determinants of profitability on SMEs are individually discussed in the next paragraphs by referring the regression result of table 4.7.

Size of SMEs (SIZE):-

From above table 4.7, the coefficient of SMEs Size (SIZE) is negative with -0.51 and it is a statistically significant determinant of profitability for SMEs in the area of this study with the probability of 0.0000 (significant at 1%). This means holding other factors remain constant one birr increase in size will result decreased in ROA by 0.51 birr (51 cents) and the relationship is statistically significant at 1% significance level and consistence with working hypothesis.

This finding is consistent with previous studies with (Farah and Nina, 2016) that size has a negative effect on SMEs but this result is different from a study conducted by (Sumaira *et al*, 2013) and (Ombworo, 2014) found size of the firm has a positive but insignificant effect on profitability. A result that study by (Aloy and Velnampy, 2014) shows no indicative relationship between firm size and profitability of firms. This indicates that when SMEs total asset increases directly affect their profitability. The reasons behind firm size have a relatively profound negative impact on profitability is complex. Larger firms have more ability to raise their product than the smaller one. It means that these firms can keep the risk as low as possible which leads to higher profitability. On the other hand, large firms face more expenses, such as costs related to managing and bureaucratic process costs and lack of qualified man power to manage overall resources will affect their resource utilization and profitability.

Firm's Current Ratio:-

As shown in table 4.7, the variable of a current ratio (CR) that is used as a proxy for measuring liquidity and to evaluate the firm's ability to meet its current obligations. In this case study, the regression result indicates that current ratio has a negative and insignificantly influence on the

profitability of SMEs even at 10% (0.2303) significance level and the coefficient of this ratio is negative with -0.000281. This means holding other factors constant a one percent increase in current ratio will result decreased 0.02% in ROA and the relationship is statistically insignificant at 10% (0.2303) significant level and inconsistency with working hypothesis regarding to significant effect but confirm expected relationship. This result is however similar to the findings of (Sumaira and Javaria, 2013) that a negative relationship of Firm Current Ratio with the SMEs profitability.

From the perspective of a short-term creditor, a high current ratio is a positive sign suggesting ample liquidity and a high likelihood of repayment as rapid decreases in the current ratio sometimes signify trouble because illiquid firms are more likely to fail and default on their debts. Yet an owner of the company might look on the same current ratio as a negative sign suggesting that the company's assets are being deployed too conservatively (Higgins, 2007). Moreover, from an operating perspective, a high current ratio could be a sign of conservative management or the natural result of a competitive strategy that emphasizes liberal credit terms and sizable inventories. In this case, the important question is not whether the current ratio is too high but whether the chosen strategy is best for the company. Therefore from the result of this study, the researcher concluded that when SMEs increases current ratio their profit will decline and this indicates that participating investment activities better than holding their idle cash and other current assets by considering short-term obligations.

Firm's Cost Income Ratio:-

From table 4.7 the result of panel data regression model as presented above indicates that; The coefficient of SMEs cost income ratio that measures firm's operating efficiency has negative with coefficient value of -0.100146 and it is statistically significant determinant of profitability for SMEs in the area of this study with the probability of 0.0000 (significant at 1%). This means holding other factors remain constant one percent increase in CIR will result decreased in ROA by 10 % and the relationship is statistically significant at 1% significance level. This finding is consistent with the findings of (Almazari, 2013) and (Radhe and Pratikshya, 2017) from their on Saudi and Nepalese commercial banks respectively that lack of operating efficient will affect firm's profitability. In this study, the result showed that how much Economies of scale is very important for profitable of SMEs business activities in the area of this study.

The cost to income ratio is defined as the operating costs (such as the administrative costs, staff salaries and property costs, excluding losses due to bad and non- performing loans) over total generated revenues. It is used to measure the impact of operating efficiency of SMEs profitability in this case study. Therefore, as shown the result on the above table 4.7 SMEs should more attention on the way they incurred operating expenses because Poor expenses management is one of the main contributors to poor profitability and failing to survival and success of the goal.

Fixed Asset Turnover Ratio:-

From the above table 4.3, fixed asset turnover ratio that is used as the measurement of asset management has a positive significant relationship with firm's profitability (ROA). As shown the result fixed assets turnover ratio has a significantly positive influence on the profitability of SMEs at 1% (0.0009) significance level and the coefficient of this ratio is positive with 0.000553. This means holding other factors remain constant a one percent increase in FATR will result in 0.05% increase on ROA in the area of this study and the relationship is statistically significant at 1% (0.0009) significance level. The result of this study is similar with the result of (Pouraghajan and Esfandiar, 2012) but different from (Mirie and Edwin, 2015) they found there was no significant effect of fixed asset turnover and asset tangibility on the financial performance of SMEs in Thika sub-county, Kenya.

The fixed assets turnover ratio measures how effectively the firm uses its plant and equipment. It is the ratio of sales to net fixed assets (Brigham and Ehrhardt, 2011). A potential problem can exist when interpreting the fixed assets turnover ratio. Recall from accounting that fixed assets reflect the historical costs of the assets. Inflation has caused the current value of many assets that were purchased in the past to be seriously understated. Therefore, if we were comparing an old firm that had acquired many of its fixed assets years ago at low prices with a new company that had acquired its fixed assets only recently (Brigham and Ehrhardt, 2011). Therefore, SMEs try to evaluate how fixed assets contribute to overall firm profitability; they should be alert to this potential problem, inflation when evaluating the fixed assets turnover ratio.

Firms Debt Ratio:-

The debt ratio that is used as a proxy for measuring leverage of SMEs in this case study has an insignificantly negatively influence on the profitability of SMEs at 5% but significance at 10%

(0.0791) significance level and the coefficient of this ratio is negative with -0.157559 coefficient. This means holding other factors remain constant a one percent increase in DR will result in 15.75 % decrease on ROA of in the area of this study and the relationship is statistically insignificant at 5% (0.0791) significance level and inconsistency with working hypothesis regarding to significant effect but confirm expected relationship. The result of this study is consistent with the result of study by both (Fatoki *et al*, 2010), (Kebewar, 2013), (Pouraghajan and Esfandiar, 2012) and (Alexandru and Radu, 2014) but opposite with the result of (Nzimbi, 2012) positive but insignificant relationship between debt ratio and profitability of SMEs.

The pecking order explains why the most profitable firms generally borrow less—not because they have low target debt ratios but because they don't need outside money. Less profitable firms issue debt because they do not have internal funds sufficient for their capital investment programs and because debt financing is first on the pecking order of external financing (Meyers, 2003). According to (Brigham and Ehrhardt, 2011) the presence of flotation costs and asymmetric information may cause a firm to raise capital according to a pecking order.

In this situation, a firm first raises capital internally by reinvesting its net income and other internal resources are better than debt financing. When that supply of funds has been exhausted, the firm will issue debt and perhaps preferred stock. Only as a last resort will the firm issue common stock. From pecking order theory, some empirical reviews and on this case study result the researcher concluded that; internal financing has no explicit cost, whereas its true cost, which is an opportunity cost, is quite real (Vernimmen, 2005) . Therefore, managers can mobilize from internal sources; retained profits and excess cash accumulated from past profit retentions without having to go to third parties sources to avoid market signaling entirely as such, it reduces the firm's financial risk associated with a firm's ability to satisfy its short-term debt obligations and maintaining firm's profitability. Finally, this study result showed that highly profitable SMEs are more likely used internally generated funds.

CHAPTER FIVE

SUMMARY, CONCLUSION, AND RECOMMENDATION

The preceding chapter presented the results and discussion, while this chapter deals with summary, conclusion, and recommendations based on the findings of the study. Accordingly, the chapter is organized into three subsections by starting Summary of Findings and followed by conclusion and recommendations.

5.1. Summary of Findings

The major objective of the study was to examine factors affecting profitability of Small and Medium Enterprises in South Gondar, specifically Woreta town. In order to achieve the specific objectives of the study in examining the effect of firm's size, liquidity, efficiency, fixed asset management, leverage; the pure performance indicator (Return on Asset) were regressed with various explanatory and control variables. The panel data was used for the sample of twelve SMEs in Woreta town from 2013 to 2017 with a total of 60 observations. Data was presented by using descriptive statistics; balanced correlation and regression analysis for performance ratios were conducted. After performing OLS regression, the researcher uses model specification test to check the appropriateness of model for regression analysis. Furthermore, the models were tested for the classical linear regression model assumptions and the results showed that all the tests are satisfactory in the regression. The study used five independent variables (firm's SIZE, CR, CIR, FATR, and DR).

The result of the least square regression presented in the above table 4.7 indicates that, the adjusted R^2 , which measures how well the regression model explains the actual variation in the dependent variable, has a value of 0.770989, Which means that 77% of the total variability of financial performance (profitability) of SMEs in area of this study is explained by the considered variables (explanatory variables; firm's size, current ratio, Cost income ratio, fixed asset turnover ratio and debt ratio) which lead to the conclusion that the selected explanatory variables provide good explanatory power. The remaining 23% of the change in ROA was explained by other factors which are not included in the model.

From the regression result, the performance indicator Return on Asset is shown as a result of, SIZE and CIR has negative and significant effect but CR and DR had the negative and insignificant effect on profitability of SMEs in Woreta town Whereas FATR had a positive and significant effect on the profitability of SMEs. Finally, both correlation and regression result showed that there is a strong effect of explanatory variables SIZE, CIR and FATR on firm's profitability measurement ROA.

5.2. Conclusion

The study specifically examines the effect of firm's efficiency on profitability and growth of SMEs in Woreta town, South Gondar. Based on major findings of this study, that achieved specific research objectives of this case study; the researcher made the following conclusions as per the regression result.

↳ Size of SMEs:-

As per the result of regression result of this study, firm's size has a negative and significant effect on profitability of SMEs. The negative relationship between size and ROA indicates that when SMEs increased firm's size, they face more expenses, such as the agency costs, costs related to managing overall property that affect the profitability by reducing it. In addition to this, SMEs those operating their business in the area of this study lacked using accessible resources efficiently and effectively to achieve firm's goal.

↳ Current ratio:-

Based on the result from regression output on table 4.7, this research concluded that firm's current ratio has a negative and insignificance effect on profitability of SMEs. This result also showed that when the enterprise CR increased with the lack of managing firm's liquidity appropriately, the result influenced Small and Medium Enterprises profitability negatively.

↳ Firm's Cost Income Ratio:-

The result from regression result revealed that, firm's cost-income ratio has a negatively and perfect significant effect on profitability of Small Medium Enterprises in the area of this case study, Woreta town. Firm's Cost Income Ratio that has strong negative and

significant powerful explanatory of profitability, which means increases this ratio affected profitability indicator ROA negatively and vice versa.

↳ **Fixed Asset Turnover Ratio:-**

As per the regression result of table 4.7, FATR that indicates of asset management has a positive and significant effect on profitability and growth of small and medium enterprises in South Gondar, specifically Woreta town. From this result the researcher concluded that managing firm's fixed assets appropriately will result positive effect on ROA by enhances to generate more profits in the area of this study.

↳ **Debt Ratio:-**

An indicator of leverage Debt Ratio that measured in total liability divided by total asset had a Negative but insignificant effect of leverage on profitability of Small and Medium Enterprises in the town of Woreta, South Gondar. This result is implied that highly profitable SMEs are more likely relied on internally generated funds such as retained earnings and other resources than debt capital as the source of financing.

5.3. Recommendations

Based on the findings and conclusions of the research, the study has recommended certain points what the researcher thought to be very critical if accordingly and properly considered and implemented by the responsible stakeholders; SMEs supervisor, Owner of SMEs, Government bodies and future researchers. Accordingly, based on the findings of the study the following recommendations were forwarded.

❖ **For SMEs Supervisor:-**

As per the result of this study, SMEs are weak relating to their overall asset utilization, liquidity management, operating efficiency and use of debt financing (leverage). Therefore, this study recommended that individuals who supervising SMEs are advised that to upgrade their knowledge of resource management by giving more attention on those variables to improve the profitability of a firm.

❖ **For SMEs Owner:-**

From the results of this study the owners of small and medium enterprises can easily understand how the efficiency and effectiveness use of resource affected SMEs

profitability. As the result showed the weakness of their liquidity, efficiency and financing decisions, this study recommended that the owner of SMEs should be upgrade their knowledge of how they run business activities or recruiting qualified manpower to manage investment activities. In addition to this they should attention on how to improve the accounting systems of their enterprises because for small enterprises, which often do not have a separate cost accounting or managerial accounting, the financial statements and records can provide some information for owners and managers in order to keep financial control over their businesses.

❖ **For government Bodies:-**

According to this study result, SMEs are weak regarding to overall resource utilization liquidity management and operating efficiency. Even though, Ethiopian government tried to solve external factors by provide a chances to get access to finance, technology, marketing areas and necessary infrastructure as much as possible, most of SMEs are failed to upgrade themselves to be large companies. This implies that governments and other potential donors are overlooked to prepare and giving sufficient training to SMEs how they manage their resources efficiently and effectively. Therefore, the researcher recommends that government should be trying to search training access to small and medium enterprises to improve their ability of economies of scale because it is very important issue to be profitability because of SMEs are very weak in their resource utilization due to lack of qualified human resources in the area of business.

❖ **For future researchers:**

As shown in the regression result profitable indicator ROA is not fully explained by selected variables in this study. This implies that there are additional internal and external variables which can be affecting the profitability of SMEs. Therefore, the researcher recommends that additional research should be conducting in other areas and variables which are not included in this study by considering large areas to identify which are the major factors that affect the performance of SMEs because this will enable them to identifying and controlling those factors to ensure maximum profitability is attained and sustained the profitability of the SMEs.

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APPENDECES

Appendix 1:-Descriptive Analysis

	ROA	SIZE	CR	CIR	FATR	DR
Mean	0.262092	5.557059	24.10226	1.022665	60.25449	0.352629
Median	0.213274	5.510444	5.822023	0.910906	19.07763	0.180697
Maximum	0.981809	6.662510	432.7279	9.123402	691.9298	2.101277
Minimum	-0.003335	4.795765	0.420324	0.549454	0.590813	0.003206
Std. Dev.	0.203573	0.436274	66.83481	1.066853	107.0208	0.455680
Skewness	1.159946	0.966327	5.071789	7.477180	3.861041	2.176803
Kurtosis	4.298083	3.823550	28.93518	57.29807	21.61765	7.368215
Jarque-Bera	17.66731	11.03346	1938.814	7929.783	1015.619	95.08797
Probability	0.000146	0.004019	0.000000	0.000000	0.000000	0.000000
Sum	15.72549	333.4235	1446.136	61.35991	3615.269	21.15776
Sum Sq. Dev.	2.445068	11.22978	263546.6	67.15232	675754.2	12.25101
Observations	60	60	60	60	60	60

Appendix 2:- Correlation Analysis Result for ROA

	ROA	SIZE	CR	CIR	FATR	DR
ROA	1.000000	-0.666326	-0.260917	-0.434306	0.244267	-0.066356
SIZE	-0.666326	1.000000	0.063620	-0.085830	-0.228870	-0.217081
CR	-0.260917	0.063620	1.000000	-0.030845	0.091722	0.092327
CIR	-0.434306	-0.085830	-0.030845	1.000000	-0.071858	0.275651
FATR	0.244267	-0.228870	0.091722	-0.071858	1.000000	0.097081
DR	-0.066356	-0.217081	0.092327	0.275651	0.097081	1.000000

Appendix 3: - Model Selection (Random Effect versus Fixed Effect Models)

Correlated Random Effects - Hausman Test

Equation: Untitled

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	23.679938	5	0.0003

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
SIZE	-0.514315	-0.314917	0.003243	0.0005
CR	-0.000281	-0.000563	0.000000	0.0119
CIR	-0.100146	-0.088716	0.000084	0.2120
FATR	0.000553	0.000350	0.000000	0.0155
DR	-0.157559	-0.099336	0.006379	0.4660

Cross-section random effects test equation:

Dependent Variable: ROA

Method: Panel Least Squares

Sample: 2013 2017

Periods included: 5

Cross-sections included: 12

Total panel (balanced) observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.046749	0.369708	8.240959	0.0000
SIZE	-0.514315	0.067244	-7.648459	0.0000
CR	-0.000281	0.000231	-1.216766	0.2303
CIR	-0.100146	0.015983	-6.265681	0.0000
FATR	0.000553	0.000155	3.565107	0.0009
DR	-0.157559	0.087585	-1.798929	0.0791

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.833093	Mean dependent var	0.262092
Adjusted R-squared	0.770989	S.D. dependent var	0.203573
S.E. of regression	0.097420	Akaike info criterion	-1.586049
Sum squared resid	0.408098	Schwarz criterion	-0.992652
Log likelihood	64.58148	Hannan-Quinn criter.	-1.353939
F-statistic	13.41432	Durbin-Watson stat	2.606179
Prob(F-statistic)	0.000000		

Appendix 5:-Test of Heteroskedasticity

Heteroskedasticity Test: White

F-statistic	1.742568	Prob. F(5,54)	0.1406
Obs*R-squared	8.335940	Prob. Chi-Square(5)	0.1387
Scaled explained SS	9.119307	Prob. Chi-Square(5)	0.1044

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Sample: 1 60

Included observations: 60

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.059999	0.017296	3.468887	0.0010
SIZE^2	-0.001449	0.000541	-2.676814	0.0098
CR^2	-8.09E-08	1.01E-07	-0.797675	0.4286
CIR^2	-0.000190	0.000260	-0.732391	0.4671
FATR^2	-2.78E-08	4.29E-08	-0.646287	0.5208
DR^2	-0.002784	0.003409	-0.816446	0.4178

R-squared	0.138932	Mean dependent var	0.012841
Adjusted R-squared	0.059204	S.D. dependent var	0.021283
S.E. of regression	0.020643	Akaike info criterion	-4.828209
Sum squared resid	0.023012	Schwarz criterion	-4.618775
Log likelihood	150.8463	Hannan-Quinn criter.	-4.746288
F-statistic	1.742568	Durbin-Watson stat	2.056052
Prob(F-statistic)	0.140626		

Appendix 6: - Test of Autocorrelation

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.660801	Prob. F(2,52)	0.5207
Obs*R-squared	1.487129	Prob. Chi-Square(2)	0.4754

Test Equation:

Dependent Variable: RESID

Method: Least Squares

Sample: 1 60

Included observations: 60

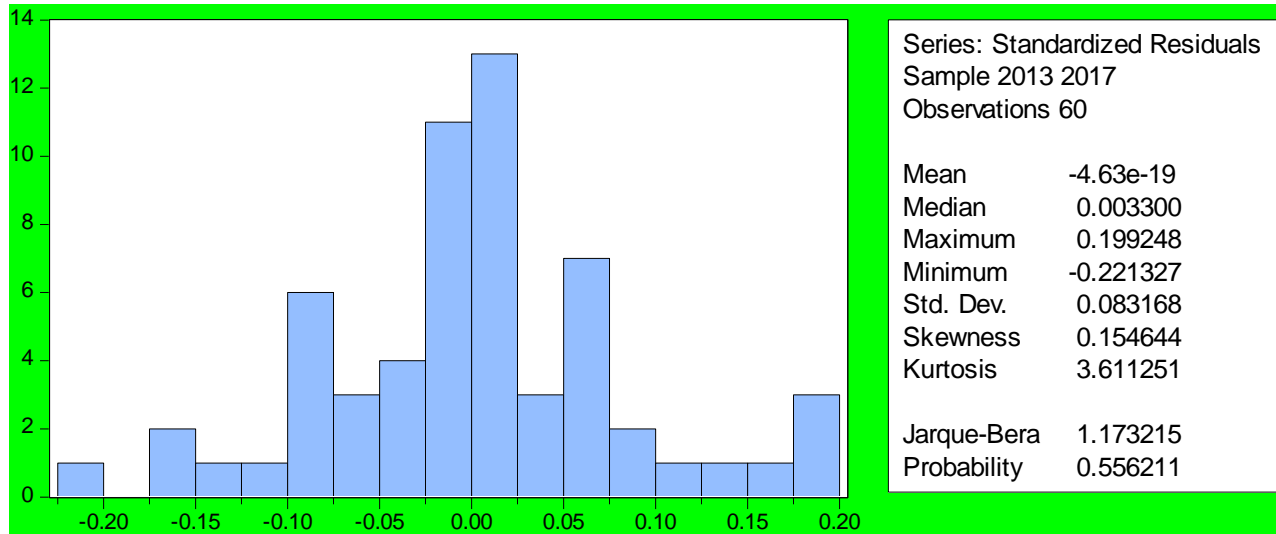
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.105507	0.235522	0.447970	0.6560
SIZE	-0.018655	0.041218	-0.452584	0.6527
CR	5.56E-05	0.000244	0.228283	0.8203
CIR	0.002004	0.015816	0.126695	0.8997
FATR	-4.90E-06	0.000156	-0.031353	0.9751
DR	-0.011740	0.038224	-0.307140	0.7600
RESID(-1)	0.070312	0.151531	0.464012	0.6446
RESID(-2)	0.162916	0.154333	1.055614	0.2960
R-squared	0.024785	Mean dependent var		3.52E-16
Adjusted R-squared	-0.106493	S.D. dependent var		0.114275
S.E. of regression	0.120206	Akaike info criterion		-1.275649
Sum squared resid	0.751377	Schwarz criterion		-0.996403
Log likelihood	46.26947	Hannan-Quinn criter.		-1.166421
F-statistic	0.188800	Durbin-Watson stat		1.966139
Prob(F-statistic)	0.986565			

Appendix 7:- Correlation Matrix for Test of Multicollinearity

	SIZE	CR	CIR	FATR	DR
SIZE	1.000000	0.063620	-0.085830	-0.228870	-0.217081
CR	0.063620	1.000000	-0.030845	0.091722	0.092327
CIR	-0.085830	-0.030845	1.000000	-0.071858	0.275651
FATR	-0.228870	0.091722	-0.071858	1.000000	0.097081
DR	-0.217081	0.092327	0.275651	0.097081	1.000000

Appendix 8: - Normality Test



Appendix 9:- Lists of SMEs and variables used in this case study

Enterprise	Year	ROA	Log SIZE	CR	CIR	FATR	DR	
Paradise Hotel	1	2013	0.040967	6.604008	8.203619	0.943798	2.312566	0.074396
	1	2014	0.040207	6.601702	20.77737	0.935411	2.322093	0.029261
	1	2015	0.042485	6.626544	16.12997	0.937006	2.893066	0.040745
	1	2016	0.035834	6.654652	26.11085	0.947706	3.076214	0.025818
	1	2017	0.027511	6.66251	44.65477	0.947332	2.332685	0.015777
Alemye Hotel	2	2013	0.454693	5.410384	2.984982	0.883535	26.87248	0.26522
	2	2014	0.291408	5.556309	4.771617	0.881587	23.59496	0.178493
	2	2015	0.243538	5.71742	4.257731	0.903267	18.67174	0.189195
	2	2016	0.177508	5.77153	7.035732	0.935758	15.7459	0.106668
	2	2017	0.101701	5.792809	16.95764	0.963612	17.37597	0.047682
Fasika Hotel	3	2013	0.463719	5.139258	5.79276	0.861784	52.39089	0.157812
	3	2014	0.491868	5.075208	4.041561	0.793747	9.180957	0.161992
	3	2015	0.406749	5.260735	5.147719	0.847399	15.99066	0.149786
	3	2016	0.181901	5.470219	15.03718	0.913282	18.4656	0.056592
	3	2017	0.137395	5.607332	37.08328	0.904098	12.94166	0.023471
Meseret Hotel	4	2013	0.728137	4.795765	5.698733	0.874567	14.59715	0.086632
	4	2014	0.264529	5.925384	5.549453	0.549454	1.527647	0.077452
	4	2015	0.091226	5.965009	7.945959	0.802965	1.371726	0.066672
	4	2016	0.083403	6.019677	6.358254	0.785966	1.347116	0.093661
	4	2017	0.062257	5.765176	37.88319	0.807245	0.590813	0.010165

Ethipia Hotel	5	2013	0.424537	5.124139	3.22207	0.847853	53.47482	0.29048
	5	2014	0.552027	5.044633	1.59758	0.873356	118.5665	0.602935
	5	2015	0.140771	5.622219	1.932239	0.94332	246.5927	0.510986
	5	2016	0.248472	5.621544	1.499007	0.934114	58.10573	0.619678
	5	2017	0.442522	5.283699	6.058036	0.852694	17.67119	0.130384
Piazza Café	6	2013	0.464176	4.815094	7.912027	0.645816	51.76846	0.12252
	6	2014	0.646595	5.094039	2.791101	0.647765	197.4807	0.353665
	6	2015	0.288325	5.170902	1.680982	0.892472	183.108	0.583887
	6	2016	0.380239	5.287863	1.779221	0.810881	244.1588	0.555691
	6	2017	0.43199	5.042621	12.71536	0.713103	109.3197	0.077394
Brand Hotel	7	2013	0.213006	5.650651	3.763271	0.951031	20.17175	0.184925
	7	2014	0.213543	5.825691	3.049092	0.93942	19.48352	0.241758
	7	2015	0.174158	5.943268	3.218725	0.950354	25.13283	0.247438
	7	2016	0.099186	6.061013	2.487152	0.96156	7.556482	0.224152
	7	2017	0.118147	6.000637	2.454694	0.967588	11.52147	0.222416
PT Hotel	8	2013	0.308676	5.361261	4.637936	0.89373	7.889206	0.108361
	8	2014	0.293541	5.502655	5.427733	0.914825	12.85296	0.115415
	8	2015	0.269695	5.457504	3.474356	0.924223	11.37679	0.163539
	8	2016	0.206528	5.606371	3.685	0.937367	14.07831	0.182902
	8	2017	0.26762	5.631845	5.851286	0.920046	13.3636	0.118925
Hailu Zaru Furniture	9	2013	0.139959	5.432427	28.97542	0.862289	66.39092	1.78084
	9	2014	0.665738	5.068378	7.121143	0.843356	37.04366	0.812743
	9	2015	0.281985	5.238055	9.068669	0.866123	37.86101	1.428938
	9	2016	0.061683	5.520047	46.44823	0.955079	4.813169	1.599657
	9	2017	0.146317	5.59581	30.22551	0.90469	8.254554	2.101277
Marta Hotel	10	2013	0.237965	5.280517	16.55023	0.882774	265.5763	0.709617
	10	2014	0.065896	5.725664	76.64821	0.808946	151.5144	0.829914
	10	2015	-0.00333	5.605971	432.7279	1.006581	171.8753	0.779276
	10	2016	0.062235	5.559018	22.71468	0.928865	4.057679	0.691841
	10	2017	0.981809	5.189578	0.420324	9.123402	2.663241	1.296893
Yirdaw Fish Wholesaler	11	2013	0.089561	5.052273	4.10287	0.933384	8.375841	0.200305
	11	2014	0.29941	5.288913	2.602251	0.968323	109.371	0.340165
	11	2015	0.133678	5.328594	3.469015	0.958664	46.34733	0.264102
	11	2016	0.137832	5.410987	3.494402	0.950678	30.03735	0.25344
	11	2017	0.394982	5.317162	6.576511	0.90853	47.29981	0.134997
Meseret & Mulat Baltena	12	2013	0.092324	5.420803	7.375847	0.879974	43.52374	0.132155
	12	2014	0.536555	5.481071	4.272275	0.936989	691.9298	0.229952
	12	2015	0.162135	5.518233	24.70001	0.844071	19.96864	0.037474
	12	2016	0.117136	5.52694	297.6457	0.928972	36.96811	0.003206
	12	2017	0.570835	5.293816	59.33725	0.927179	164.1221	0.016025