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# The impact of firms' characteristics in accessing finance by micro, small and medium enterprises in Southern Ethiopia

## **Desta Zelalem\* and Mebrat Wubante**

Department of Accounting and Finance, Faculty of Business and Economics, Hawassa University, P. O. Box 05, Ethiopia.

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There is a concurrence among different stakeholders such as policy makers, economists, and business experts that Micro Small and Medium enterprises (MSMEs) are engines of economic growth. The dynamic role of MSMEs in developing countries insures them as engines through which the growth objectives of developing countries can be achieved. However many problems encounter MSMEs and as a result, many firms perform dismally and fail to grow. Given this high failure rate, it becomes vital to research the factors required to enable the MSMEs to survive and indeed progress to the growth phase of the organizational life cycle. The study was undertaken to know the effect of firms' characteristics in accessing of financing and other factors affecting the performance of MSMEs in Southern Ethiopia. The study used qualitative and quantitative research design. The target population for the study was 345 enterprises registered and operated in Hawassa City, Ethiopia. The study used a survey questionnaire and interview to collect the required primary data from a sample of 260 MSMEs and also documents were reviewed to collect the necessary secondary data. The collected data were coded, quantified and analyzed quantitatively and qualitatively. The data were analyzed by the use of statistical package for social sciences (SPSS) software. The study concluded that all the independent variables except Legal Status of Business Enterprises produced statistically significant results and all the Independent variables had a positive relationship with the dependent variable. In addition to this marketing, managerial and environmental constraints are found to affect the operating activities of enterprises in southern Ethiopia.

Key words: Accessing of financing, characteristics, micro small and medium enterprises (MSMEs), performance.

## INTRODUCTION

There is consensus among policy makers, economists, and business experts that Micro Small and Medium

enterprises (MSMEs) are drivers of economic growth. A healthy MSME sector contributes prominently to the

\*Corresponding author. E-mail: desta.zele@gmail.com.

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economy through creating more employment opportunities, generating higher production volumes, increasing exports and introducing innovation and entrepreneurship skills. The dynamic role of MSMEs in developing countries insures them as engines through which the growth objectives of developing countries can be achieved.

According to Mead (1994), it is estimated that MSMEs employ 22% of the adult population in developing countries. United Nations Industrial Development Organization (UNIDO) estimates that SMEs represent over 90% of private business and contribute to more than 50% of employment and Gross Domestic Product (GDP) in most African countries (UNIDO, 1999). Despite their significant importance and MSME's contribution to economic growth, MSME's across the whole world and in Ethiopia in particular, are still faced with numerous challenges that inhibit entrepreneurial growth. Apart from MSME's funding and access to finance (which is the focus of this study), the Global Entrepreneurship Monitor (GEM) Reports (2001-2010) noted that, developing countries MSMEs also suffer from poor management skills which is a result of lack of adequate training and education owing to limited access to finance. Pretorius and Shaw (2004) observed that accessibility to external finance is essential to solve shortage of MSMEs cash flows. Financing is required for MSMEs to set up and enlarge their business operations, new product development, research and development, human resource development and acquiring of up-to-date production equipment and technology. Most of MSMEs rely on internal finance since they cannot afford external finance easily: only prioritized source becomes internal finance but still internal finance is inadequate for MSMEs' development and profitability. Most MSMEs' failure to access debt financing results in an inadequate capital structure.

In Ethiopia, the government has been attracted by MSMEs to solve unemployment problem which recently is spreading across the country. Despite MSMEs contributions to the county's job creation, their continuing growth and strengthens has been compromised by the persistent limitations on their access to financing from formal-sector. The finance gap in the Ethiopian MSME sector deteriorates MSMEs' productivity, performance and contributions to the country's economy. Thus, this paper tries to investigate the impact of firms' characteristics in accessing finance and hence, the effect of financing gap on the growth and development of MSMEs in Southern Ethiopia in addition to financing gap the study has also tried to assess the effect of other constraints such as; marketing constraints, managerial constraints and environmental constraints on the performance of MSMEs in the study area.

Apart from their significances, one of the most important challenges facing MSMEs is to overcome distortions that hinder their growth. MSMEs face

difficulties in obtaining finance, have a high failure rate, experience weak performance and have inadequate capitalization (Altenburg and Eckhart, 2006). Therefore, it is significant to examine whether firms' characteristics has a significant effect on access to debt finance and performance of MSMEs in return. This will enable MSMEs to positively contribute to the development challenges such as unemployment, poverty, income inequality and weak economic growth. Therefore, the extrinsic value of the results of this research is to provide empirical evidence about the impact characteristics in accessing of financing by SMEs and can provide helpful suggestions to improve their sustainability and performance and, in the long-run, reduce the failure rate of MSMEs in Southern Ethiopia. The study has the following research objectives:

- (1) To analyze whether MSMEs located in Hawassa City southern Ethiopia face financing gap or not.
- (2) To investigate the effect of MSME's characteristics in accessing finance.
- (3) To identify the challenges faced by MSMEs to get finance from financial institutions and other sources in the study areas
- (4) To assess the effect of limited access of financing on the growth and development of MSMEs
- (5) To identify other factors that affect the performance of MSMEs in the study area.

Owing to the limited evidence regarding the impact of firm characteristics in accessing of finance by MSMEs, the current study attempts to investigate the impact of firm characteristics in accessing finance by MSMEs in Hawassa southern Ethiopia, which may have greater significance. In this regard, the outcomes in the study might provide relevant insights into the existing challenges facing MSMEs in accessing finance and factors affecting the performance of MSMEs in Southern Ethiopia. And also this study is meant to alert the effect of limited access to finance on the performance of MSMEs, in Southern Ethiopia.

## LITRATURE REVIEW

Financing is one of the crucial elements to undertake R&D activities that determine the development of MSMEs. According to Jeyifo (2003), while encouraging strides have been made in liberalizing the domestic financial sector, still it is a bottleneck for the rapid growth and development of the sector. As Eshetu and Mammo (2009) indicated, 79% of MSMEs in Ethiopia stated that, getting credit finance from formal financial institutions is a key problem. It is obvious that inadequate access to credit limits the expansion of firms, choice of technology, hiring suitable premises and the employment of skilled

personnel. This hinders the potential to adequately meet the needs of consumers. Access to credit on favorable terms is essential for initiating new business ventures, fulfilling working capital requirements, as well as for expanding existing businesses. In this regard, the formal financial institutions are reluctant to avail credit facilities to the sector. Formal financial institutions such as commercial banks are reluctant to lend small amounts of money to small businesses because the cost of administering the loan exceeds the benefits accrued to them.

The financing of Micro Small and Medium-sized Enterprises (MSMEs) has been a subject of great interest both to policymakers and researchers because of the significance of MSMEs in private sectors around the world and the perception that these firms are financially constrained. Data collected by Ayyagari et al. (2007) for 76 developed and developing countries indicate that, on average, MSMEs account for close to 60 percent of manufacturing employment. More importantly, a number of studies using firm-level survey data have shown that MSMEs not only perceive access to finance and the cost of credit to be greater obstacles than large firms, but these factors constrain MSMEs (affect their performance) more than large firms (Schiffer and Weder, 2001; IADB, 2004; Beck and Demirguc-Kunt, 2006; Beck et al., 2006).

According to Romano and Ratnatunga (1995), the marketing problems of small firms are numerous and complex. It is obvious that information about markets and customers is crucial for managerial decisions. However, due to lack of resources and expertise, many small firms do not conduct marketing research, keep customer records, make follow up on their customers and study customers' characteristics and preferences. The first few years of small firms require aggressive marketing of products and services. But, due to lack of understanding of the strategic importance of marketing in achieving competitive advantage, startup firms do not sufficiently market their products and services. Startup firms do not usually put greater emphasis on establishing customer relationship through an extension of credits and provision of warranties and quarantees.

The future of small firms depends on the development and maintenance of human resources. As Drucker (1982) noted they require "a few highly competent people, dedicated to the task, driven by it, working full time and very hard". For many firms, the attraction, development and maintenance of successful individuals are a critical success factor. Recruiting new employee is one of the biggest challenges facing small firms, and a key component of organizational success. While a number of studies (Hambrick, 1982; Thomas, 1980) have explored the fit between organization and environment, there is less knowledge, particularly in small firms, about how impressions of the environment are formed among owner/managers who are responsible for responding with new strategies and approaches.

### Impact of firm characteristics in access finance

#### Location of the firm

Berger and Udell (2006) find out that the geographic closeness between lenders and customers has an association with a firm's access to credit.

## Industry of the Firm

The industry in which a firm operates does not influence the firm's capital structure directly but might do so indirectly through the composition and nature of the firm's assets (Hall et al., 2000).

#### Firm's Size

The firm's size has a crucial weight on the debt proportion in the capital structure of the firm since real assets tend to influence the accessibility to long debt whenever required (Burkart and Ellingsen, 2004).

#### Firm's business information

Kitindi et al. (2007) point out that lenders use firm's business information to assess current and future performance of the firm.

## Age of the firm

Firms at the early stage of operation use to experience difficulties in accessing debt finance because of informational disparities (Chandler, 2009).

## Legal status of the firm (Incorporation)

Harhoff et al. (1998) point out that a firm with limited liability (incorporated) possesses development attributes than a firm with unlimited liability.

#### Firm's collaterals

Bougheas et al. (2006) pointed out that the requirement of collateral is a crucial aspect for SMEs to succeed in accessing external financing from lenders. To undertake this study and investigate the impact of firms' characteristics (Industry of the Firm, location of the firm, firm size, firms' business information, age of the firm, Legal Status of the Firm (Incorporation) and firms' collaterals in accessing finance by MSMEs by reviewing literatures, we hypothesized as follows:

H<sub>0</sub>: Industry of the firm does not have any significant impact on accessing finance by MSMEs.

H₁: Industry of the firm has a significant impact on accessing finance by MSMEs.

H<sub>0</sub>: location of the firm does not have any significant impact on accessing finance by MSMEs.

 $H_0$ : Firm size does not have any significant impact on access to finance by MSMEs.

 $H_1$ : Firm size has a significant impact on access to finance by MSMEs.

H<sub>0</sub>: firms' business information does not have any significant impact on access to finance by MSME's.

 $H_1$ : firms' business information has a significant impact on access to finance by MSMEs.

H<sub>0</sub>: age of the firm does not have any significant impact on access to finance by MSMEs.

 $H_1$ : age of the firm has a significant impact on access to finance by MSMEs.

 $H_0$ : firms' collaterals do not have any significant impact on access to finance by MSMEs.

 $H_1$ : firms' collaterals have a significant impact on access to finance by MSMEs.

 $H_0$ : Legal status of the firm (Incorporation) does not have any significant impact on access to finance by MSMEs.

H₁: Legal status of the firm (Incorporation) has a significant impact on access to finance by MSMEs.

#### **MATERIALS AND METHODS**

#### Description of the study area

This study was confined to Hawassa City, Southern Ethiopia, which is located at 275 KM south of Addis Ababa on the shores of Lake Hawassa in the Great Rift Valley . Hawassa is the capital of Southern Ethiopia and one of the highly growing cities in Ethiopia.

## Study design

Research design is the arrangement of conditions for collection, analysis and interpretation of data in a manner to combine relevance to the research purpose with economy in procedure (Kothari, 2004). Both Ordinary Least Square (OLS) Regression and descriptive statics methods of data analysis were employed. Descriptive statics methods were employed for the purpose of interpreting qualitative data, and hence, different data presentation tools such as tables, graphs, percentages, pie-charts and bargraphs were utilized to discuss the qualitative data. In addition, to investigate the findings and test the proposed hypothesis statistical analysis Ordinary Least Square (OLS) Regression was employed to establish the association between dependent and independent variables.

The study design was a survey conducted on a sample of; 106 micro, 98 small size and 56 medium size enterprises (MSMEs) located in Southern, Ethiopia. According to Owens (2002), survey research design has the advantage of uniqueness since information gathered is not available from other sources, having unbiased representation of population of interest and standardization of measurement as same information is collected from every respondent.

#### Sampling design and procedure

As information obtained from Trade and Industry Bureau of

Hawassa City, currently there are a total of 345 micro small and medium enterprises registered and operated in Hawassa City which are engaged in different economic sectors such as trade, service manufacturing and urban agriculture. From these total of 345 MSMES 150 are Micro enterprises, 130 are small size enterprises and the remaining 65 are medium size enterprises. To get a representative sample size for the current study stratified random sampling and purposive non probability sampling techniques were employed. The reason why stratified random sampling procedure is preferred is the fact that, the resulting sample would represent the entire population proportionally from each size of enterprises and to distribute the questionnaires conveniently from sampled enterprises Purposive sampling was employed. In stratified sampling, the population of N units is first divided into different groups of units which are assumed to be divided according to a specific characteristic, which is based on size of enterprise (Micro, Small and Medium). These subgroups, called strata, together represent the whole population, so that  $N_1+N_2+N_3=N$ .

#### Sample size determination

The research has a confidence level of 95%; thus from a total number of 345 MSMEs operating in Hawassa City 260 sample size has been selected as respondents by adopting Yamane's (1967) formula. The formula of the sample size for finite population is:

$$n = \frac{N}{1 + N(e)^2}$$
 .....Q1

Where n= is the sample size needed,

N= is total number of population for the study,

e= the precision level which is the margin of error. In this study e = 0.05 was used.

Therefore,

$$n_1 = \frac{150}{1 + 150(0.05)^2} = 106$$

$$n_2 = \frac{130}{1 + 100(0.05)^2} = 98$$

$$n_3 = \frac{65}{1 + 65(0.05)^2} = 56$$

Thus, the required sample size for this study was  $n = n_1 + n_2 + n_3$  n = 106 + 98 + 56 n = 260

Then, for a total sample of 260, we conveniently select 106 enterprises from micro size, 98 enterprises from small, and 56 enterprises from medium; and the questionnaires were distributed accordingly, for managers (owners) of each enterprises located in Hawassa, Ethiopia.

### Study methodology

#### Data sources

For the purpose of accomplishing the objectives of this study, both primary and secondary sources of data were used. The primary data were obtained from owners (managers) of Micro Small and Medium Enterprises located in the study area via distributing questionnaire for the selected owners (managers). On the other

hand, secondary data were collected from different documents used as reference and reports maintained by the selected organization over the last 10 years for the period 2007-2016.

#### Method of data collection

Primary data were collected by using structured questionnaire. The questionnaires were designed in a manner which is appropriate to achieve the objectives of the study comprising open ended and close ended questions. The secondary data, on the other hand, collected from the selected Micro Small and Medium Enterprises through review of relevant documents pertaining to the study including historical documents, books, newspaper, and reports and also from other concerned offices for the study were used as reference.

## Data collection procedures

We prepared survey questionnaires to the target respondents in an attempt to collect the required data for the study. Research enumerators were used to assist the study in gathering the relevant information. The research enumerators were trained on the aspects of the questionnaire and on how to handle the respondents to ensure that ethical considerations were observed. Self-administered questionnaires allow the participants to respond to the questions by themselves and at their own pace for those uneducated respondents, questions were translated in their mother tongue.

#### Method of data analysis

Both regression and descriptive statics methods of data analysis were employed. Descriptive statics methods such as mean and standard deviation were employed for the purpose of interpreting qualitative data, and hence, different data presentation tools such as tables, percentages, pie-charts and bar-graphs were utilized to discuss the qualitative data. In order to explain the findings and to test the proposed hypotheses the study employed a pertinent method for normal data distributed which was Ordinary Least Square (OLS) Regression Model. There are six independent variables (Industry of the Firm, firm size, firms' business information, age of the firm, legal status of the firm (Incorporation) and firms' collaterals) and the dependent variable is accessing of finance. Model specification is as follows:

CrAces =  $\alpha i$  ++  $\beta 1 Indi$  +  $\beta 2 Binfo$  +  $\beta 3 Size$  +  $\beta 4 Age$ +  $\beta 5 Collt$ +  $\beta 6 Incop$  + ui......Q2.

Where: CrAces = Credit access by an Enterprise

Ind = type of Business activity that an enterprise engages in Binfo = Business information maintained by an enterprise

Size = Size of enterprise (measured by the number of employees)

Age = Age of enterprise

Coll = Collateral enterprise holds when applying for a loan and Incop = Legal status of enterprise during the loan application ui=Residual values, which are any variables that may affect the dependent variable but not incorporated in this model.

#### Normality, validity and reliability

Validity and reliability of a research are key determinants of good research analysis and output. In order to check the validity of the instrument used in this study, we conducted a pilot study. While to

test the reliability of the Likert scale used in this study, reliability analysis was done using Cronbach's Alpha as the measure. In addition to this, we employed Histogram and normal P-P plot whether the dependent variable is approximately normally distributed for each category of the independent variables; analysis of variance was also done to establish the significance of the regression model.

#### DATA ANALYSIS AND DISCUSSION

This part of the study is concerned with the major findings and interpretation of the data obtained through questionnaire, interviews and some document analysis in the sample firms located in the city of Hawassa, Southern Ethiopia. The gathered necessary information was edited and cleaned for completeness in preparation for coding. In order to analyze and interpret the major findings of the study we employed different descriptive statistical data presentation tools such as table, percentage, and pie and bar charts. In addition to the purpose of assessing the effect of marketing, managerial and environmental constraints on the performance of MSMEs we used descriptive statistics such as mean and standard deviation. Regression analysis was used to test the relationship between the variables under study in relation to the objectives of the study. Analysis of variance (ANOVA) was used to confirm the findings of regression.

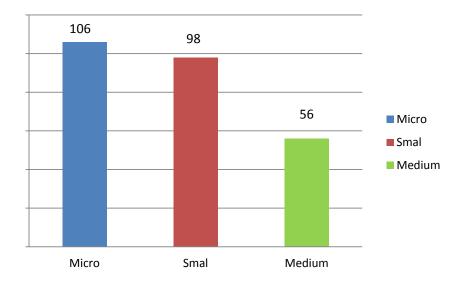
Two hundred sixty questionnaires were distributed and collected. The survey questionnaires were prepared and distributed to respondents who were working in SMME sectors and were potentially in need of debt finance. The study assesses how the firm's characteristics (Age, Size, Collateral, Business Information, Type of Business and Legal Status of firms) impact firm's credit accessibility from finance institutions, especially from banks. In addition to this we tried to review the impact of other factors (such as, marketing constraints, managerial constraints, and environmental constraints) on the performance of MSMEs located in the city of Hawassa, Southern Ethiopia.

## **Descriptive statistics**

### Demographic information of respondents

**Size of sampled enterprises:** This section sought to know the size of sampled Business Enterprises. As can be seen from Figure 1, out of the total respondents of 260, majority of the respondents operated in Micro size Enterprises which consist of 40.77 percent followed by Small Size Enterprises and Medium Size Enterprises which consist of 37.69 and 21.54% respectively.

**Type of business activities:** The study wants to identify the type of commercial activities that the target populations were engaged in. The finding indicated that most of the respondents which comprise 99(38%) of the



**Figure 1.** Size of sampled enterprises Source: Survey, 2016/2017.

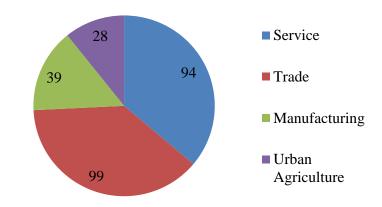


Figure 2. Type of business activities.

respondents engaged in trade activity followed by 94(36%) of the respondents who engaged in service activities and then 39(15%) of the respondents who engaged in manufacturing activities. The remaining 28(11%) of the respondents engaged in urban agriculture. From this we can conclude that the target population in the study consists of respondents who engaged in different commercial activities. The findings are summarized in Figure 2.

**Legal status of business:** The study aims to find out the legal status of selected business enterprises. The study indicated that most 128 (49%) are partnership form of business enterprises followed by 97(37%) sole proprietorship and the remaining 35(13%) respondents are in corporation form of business enterprises. The findings are shown in Figure 3.

Access to credit: This study sought and obtained the credit access of respondents. 143 (55%) of the respondents had credit access and the remaining 117(45%) of the respondents stated that, they did not have credit access. The study findings are as shown in Figure 4.

## Impact of marketing, managerial and environmental constraints on the performance of MSMEs

It is obvious that, marketing, managerial and environmental constraints are the major factors affecting the performance of MSMEs. In the current study we want to identify the extent to which marketing, managerial and environmental constraints affected the performance of MSMEs located in Hawassa City, Southern Ethiopia. The extent was measured on a Likert Scale of 1-5, where 5 is

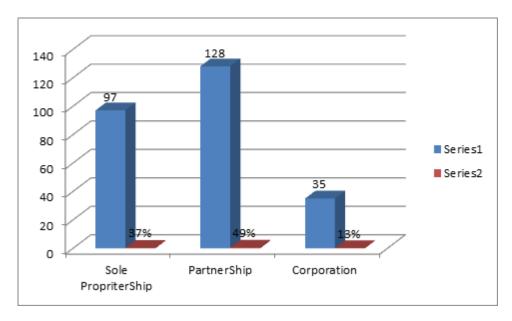
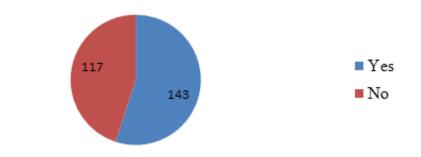


Figure 3. Legal status of sampled business enterprises.



**Figure 4.** Credit Access. Source: Survey, 2016/2017.

- to a very great extent; 4- to a great extent; 3- to moderate extent; 2- small extent, and 1- no extent. Interpretation was done as follows: Mean value of 1-1.5: no extent; 1.6-2.5: small extent; 2.6-3.5: to moderate extent; 3.6-4.5: to a great extent and 4.6 - 5.0: to a very great extent. The results of the study are shown and presented in the following subsequent sections (Table 1). And the computed standard deviations were used to indicate the extent to which the respondents' opinions about the statements on the impact of marketing, managerial and environmental constraints on the performance of MSMEs varied.

## Impact of marketing constraints on the performance of MSMEs

The current study indicated that proper demand

forecasting practices and poor customer relationship and handling affect performance of Micro Enterprises at Hawassa city, southern Ethiopia to a moderate extent, with mean value of 3.3019 and standard deviation of 1.41536 and mean value of 2.9057 standard deviation of 1.17537 respectively. And the other items; lack of market linkages, lack of follow up on customers and lack of keeping customer records affect the performance of Micro Enterprises located at Hawassa City, southern Ethiopia to a great extent with mean of 4.4906, standard deviation of 0.96851 and mean of 4.3679 and standard deviation of 0.95942, and mean of 4.4528, and standard deviation of 0.84100, respectively. The respondents differed more in the statement regarding whether availability of proper demand forecasting practices affect performance of Micro Enterprises (Standard deviation of 1.41536) while they differed less on the statement that lack of keeping customer records (Standard deviation of

Table 1. The Impact of marketing constraints on the performance of micro enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Proper Demand Forecasting Practices	106	1.00	5.00	3.3019	1.41536
Poor Customer Relationship and Handling	106	1.00	5.00	2.9057	1.17537
Lack of Market Linkages	106	1.00	5.00	4.4906	0.96851
Lack of Keeping Customer Records	106	1.00	5.00	4.4528	0.84100
Lack of Follow Up On Customers	106	1.00	5.00	4.3679	0.95942
Overall Mean				3.90	1.07

Table 2. The impact of marketing constraints on the performance of small size enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Proper Demand Forecasting Practices	98	2.00	5.00	3.3673	0.85419
Lack Of Market Linkages	98	1.00	5.00	3.9592	1.21772
Poor Customer Relationship And Handling	98	1.00	5.00	3.5306	1.29395
Lack Of Keeping Customer Records	98	1.00	5.00	2.9082	1.40020
Lack Of Follow-Up On Customers	98	1.00	5.00	4.0000	1.21842
Overall Mean				3.75	1.2

Source: own computation, 2016/2017.

**Table 3.** The impact of marketing constraints on the performance of medium size enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Proper Demand Forecasting Practices	56	1.00	5.00	2.60	1.24720
Lack Of Market Linkages	56	1.00	5.00	2.9286	1.27717
Poor Customer Relationship And Handling	56	1.00	5.00	2.1964	1.15080
Lack Of Keeping Customer Records	56	1.00	5.00	3.4107	1.02295
Lack Of Follow-Up On Customers	56	1.00	5.00	2.0536	1.18198
Overall Mean				2.63	1.18

Source: own computation, 2016/2017.

0.84100). Overall, marketing constraints affected the performance of Micro Enterprises in Hawassa city, Southern Ethiopia to a Great extent (mean of 3.9, standard deviation of 1.07) (Table 2). As can be seen from Table 2. Proper Demand Forecasting Practices and Lack of Keeping Customer Records affects performance of Small Size Enterprises at Hawassa city, Ethiopia to a moderate extent (mean value of 3.3673 and standard deviation of 0.85419) and (mean value of 2.9082, standard deviation of 1.40020) respectively. And the other items, Lack of Market Linkages, Lack of follow up on customers and Poor Customer Relationship and Handling affects the performance of Small Size Enterprises located at Hawassa City, Southern Ethiopia to a Great Extent with (mean value of 3.9592, standard deviation of 1.21772), (mean value of 4.0000, Standard deviation of 1.21842), and (mean value of 3.5306,

standard deviation of 1.29395) respectively. The respondents differed more on the statement regarding whether Lack of Keeping Customer Records affects performance of Small Size Enterprises (standard deviation of 1.40020) while they differed less on the statement that Proper Demand Forecasting Practices (standard deviation of 0.85419). Overall, marketing constraints affected the performance of Small Size Enterprises located in Hawassa city, Southern Ethiopia to a Great extent (mean value of 3.75, standard deviation of 1.2) (Table 3). As it is presented in Table 3, Proper Demand Forecasting Practices, Lack Of Market Linkages and Lack Of Keeping Customer Records affect performance of Medium Size Enterprises at Hawassa, Ethiopia to a Moderate extent (mean value of 2.60, standard deviation of 1.24720), (mean value of 2.9286, standard deviation of 1.27717), and (mean value of

Table 4. Impact of managerial constraints on the performance of micro enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Lack of Division of Activities	106	2.00	5.00	4.6604	0.58370
High Employee Turnover	106	1.00	5.00	3.9811	1.22654
Unavailability of Skilled Man Power	106	1.00	5.00	2.632	1.31891
Lack of Formal Recruitment	106	1.00	5.00	4.452	0.84100
Overall mean				3.93	0.99

Table 5. Impact of managerial constraints on the performance of small size enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Lack Of Division Of Activities	98	1.00	5.00	3.7449	1.22946
High Employee Turnover	98	1.00	5.00	2.51	1.28432
Unavailability Of Skilled Manpower	98	1.00	5.00	2.4592	1.18555
Lack Of Formal Recruitment	98	1.00	5.00	4.1939	1.01187
Overall Mean				3.24	1.18

Source: own computation, 2016/2017.

3.4107, standard deviation of 1.02295) respectively. And the other items: Poor Customer Relationships and Handling and Lack of follow up on customers affect the performance of Medium Size Enterprises located at Hawassa, Southern Ethiopia to a Small Extent (mean value of 2.1964, standard deviation of 1.15080) and (mean value of 2.0536, standard deviation of 1.18198) respectively. The respondents differed more on the statement on whether Lack of Market Linkages affects performance of Medium Size Enterprises (standard deviation of 1.27717) while they differed less on the statement that lack of keeping customer records affects performance of Medium Enterprises (standard deviation of 1.02295). Overall, marketing constraints affected the performance of Medium Size Enterprises in Hawassa, Southern Ethiopia to a Moderate extent (mean value of 2.63, standard deviation of 1.18).

## Impact of managerial constraints on the performance of MSME

As different scholars indicted, the success of MSMEs depends on the development and maintenance of human resources. Managerial factors consist of clear Division of Activities and Duties, Employee Turnover, Availability of Skilled Workers, Lack of Formal Recruitment and Hiring Procedures. In this section, we also want to recognize the extent to which Availability of Managerial Experience affected the performance of Micro, Small and Medium Size Enterprises located in Hawassa, Southern Ethiopia. The results of the study are shown in Tables 4.

In this study to assess the impact of managerial constraints on the performance of Micro Enterprises four items were incorporated. The study established that lack of division of activities, high employee turnover and lack of formal recruitment Procedures affect the performance of Micro Enterprises at Hawassa, Southern Ethiopia to a great extent (mean value of 4.6604, standard deviation of 0.58370), (mean value of 3.9811, standard deviation of 1.22654) and (mean value of 4.452, standard deviation of 0.84100) respectively. And the other item: Unavailability of Skilled Man Power affects the performance of Micro Enterprises Located in Hawassa, southern Ethiopia to a Moderate extent (mean value of 2.632, standard deviation of 1.31891). The respondents differed more on the statement on Unavailability of Skilled Man Power affects performance of Micro Enterprises (standard deviation of 1.31891) while they differed less on the statement that Lack of division of activities affects performance of Micro Enterprises (standard deviation of 0.58370). Overall, managerial constraints affected the performance of Micro Enterprises in Hawassa city, Southern Ethiopia to a great extent (mean value of 3.93, standard deviation of 0.99) (Table 5).

The study established that lack of division of activities and lack of formal recruitment procedures affect the performance of Small Size Enterprises at Hawassa, Ethiopia to a great extent (mean value of 3.7449, standard deviation of 1.22946) and (mean value of 4.1939, standard deviation of 1.01187). And the other items; Unavailability of Skilled Man Power and High Employee Turnover affect the performance of Small Size Enterprises Located in Hawassa, Southern Ethiopia to a Small extent (mean value of 2.4592, standard deviation

Table 6. Impact of managerial constraints on the performance of medium size enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Lack Of Division Of Activities	56	1.00	5.00	2.5536	1.23465
High Employee Turnover	56	2.00	5.00	3.2857	1.20173
Unavailability Of Skilled Manpower	56	1.00	5.00	2.7321	1.32790
Lack Of Formal Recruitment	56	1.00	5.00	1.8571	1.16664
Overall Mean				2.61	1.23

Table 7. Impact of environmental constraints on the performance of micro enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Competition With Large Industrial Units	106	2.00	5.00	4.500	0.77006
Bureaucratic Setup Procedures	106	1.00	5.00	4.0000	1.21890
Income Tax Structure	106	2.00	5.00	4.6415	0.75830
Policy Uncertainties	106	1.00	5.00	4.4528	0.84100
National Culture And Beliefs	106	1.00	5.00	2.6509	1.28020
Rapid Technological Changes Not Easily Adopted	106	2.00	5.00	4.4245	0.76778
Overall Mean				4.12	0.94

Source: own computation, 2016/2017.

of 1.18555) and (mean value of 2.51, standard deviation of 1.28432). The respondents differed more on the statement on High Employee Turnover affects performance of Small Size Enterprises (standard deviation of 1.28432) while they differed less on the statement that Lack of Formal Recruitment Procedures affects performance of Small Size Enterprises (standard deviation of 1.01187). Overall, managerial constraints affected the performance of Small Size Enterprises in Hawassa, Southern Ethiopia to a Moderate extent (mean value of 3.2493, standard deviation of 1.18) (Table 6).

The study established that Lack of Division of Activities, High Employee Turnover and Unavailability of Skilled Manpower affect the performance of Medium Size Enterprises at Hawassa, Ethiopia to moderate extent (mean value of 2.5536, standard deviation of 1.23465), (mean value of 3.2857, standard deviation of 1.20173) (mean value of 2.7321, standard deviation of 1.32790). And Lack of Formal Recruitment Procedure affects the performance of Medium Size Enterprises Located in Hawassa, Southern Ethiopia to a small extent (mean value of 1.8571, standard deviation of 1.16664). The respondents differed more on the statement. Unavailability of skilled Manpower affects performance of Medium Size Enterprises (standard deviation of 1.32790) while they differed less on the statement that Lack of Formal Recruitment Procedures affects performance of Medium Size Enterprises (standard deviation of 1.16664). Overall, managerial constraints affected the performance of Medium Size Enterprises in Hawassa, Southern Ethiopia to a moderate extent (mean value of 2.61, standard deviation of 1.23).

## Impact of environmental constraints on the performance of MSMEs

As indicator of environmental factors affecting the performance of MSMEs under the study area, we consider competition with large industrial units, bureaucratic setup procedures, income tax structure, policy uncertainties, national culture and beliefs on business, rapid technological changes. The results of the study are shown in Table 7. This study also assesses the impact of environmental constraints on the performance of Micro Enterprises in Hawassa, Southern Ethiopia. As can be seen from the table, the study established that, income tax structure affects the performance of Micro Enterprises at Hawassa, Southern Ethiopia to a very great extent (mean value of 4.6415, Standard deviation of 0.75830). Competition with large industrial units, bureaucratic setup procedures, policy uncertainties and rapid technological changes not easily adopted affect the performance of micro enterprises Located in Hawassa, Ethiopia to a great extent (mean value of 4.500, Standard deviation of 0.77006), (mean value of 4.0000, Standard deviation of 1.21890), (mean value of 4.4528, Standard deviation of 0.84100), and (mean value of 4.4245, Standard deviation of 0.76778) respectively. National Culture and Beliefs affects the performance of Micro

Table 8. Impact of environmental constraints on the performance of small size enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Competition With Large Industrial Units	98	1.00	5.00	3.9898	1.02036
Bureaucratic Setup Procedures	98	1.00	5.00	3.8571	1.11226
Income Tax Structure	98	2.00	5.00	4.0918	1.06574
Policy Uncertainties	98	2.00	5.00	4.1327	0.92656
National Culture And Beliefs	98	2.00	5.00	3.6633	1.17486
Rapid Technological Changes Not Easily Adopted	98	1.00	5.00	3.6531	1.30109
Overall Mean				3.89	1.10

Table 9. Impact of environmental constraints on the performance of medium size enterprises descriptive statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Competition With Large Industrial Units	56	2.00	5.00	4.2857	0.98561
Bureaucratic Setup Procedures	56	2.00	5.00	3.7143	0.98561
Income Tax Structure	56	2.00	5.00	2.7143	1.09069
Policy Uncertainties	56	2.00	4.00	2.6250	0.86471
National Culture And Beliefs	56	2.00	5.00	3.5000	0.89443
Rapid Technological Changes Not Easily Adopted	56	2.00	4.00	3.0714	0.91168
Overall Mean				3.32	0.096

Source: own computation, 2016/2017.

Enterprises Located in Hawassa, Southern Ethiopia to a moderate extent (mean value of 2.6509, Standard deviation of 1.28020). The respondents differed more on the statement on National Culture and Beliefs affects performance of Micro Enterprises (Standard deviation of 1.28020) while they differed less on the statement that Income Tax Structure affects performance of Micro Enterprises (Standard deviation of 0.75830). Overall, environmental constraints affected the performance of micro enterprises in Hawassa, Southern Ethiopia to a great extent (mean value of 4.12, Standard deviation of 0.94).

As can be seen from the presentation in Table 8, the study established that, all the variables are considered to assess the effect of Environmental Constraints on the performance of Small Size Enterprises located in Hawassa, Southern Ethiopia to a Great Extent with the overall mean value of 3.89 and standard deviation of 1.10. The respondents differed more on the statement, Rapid Technological Changes Not Easily Adopted affects the performance of Small Size Enterprises with standard deviation of 1.30109 while they differed less on the statement that policy uncertainty affects the performance of Small Size Enterprises with standard deviation of .92656). Among the statements used to assess the opinion of respondents about the effect of environmental constraints on the performance of Medium Size Enterprises located in Hawassa Southern Ethiopia; Competition with Large Industrial Units and Bureaucratic Setup Procedures affect their performance to a great extent (mean value of 4.2857, Standard deviation of 0.98561) and (mean value of 3.7143, Standard deviation of 0.98561). Whereas Income Tax Structure, Policy Uncertainties, National Culture and Beliefs and Rapid technological Changes not easily adopted affect the Performance of Medium Size Enterprises to a Moderate Extent (mean value 2.7143, Standard deviation of 1.09069), (mean value 2.6250, Standard deviation of 0.86471), (mean value 3.5000, Standard deviation of 0.89443) and (mean value 3.0714, Standard deviation of 0.91168) (Table 9). The respondents differed more on the statement, Income Tax Structure affects the performance of Medium Size Enterprises (Standard deviation of 1.09069) while they differed less on the statement that policy uncertainty affects the performance of Medium Size Enterprises (Standard deviation of 0.86471). Overall. environmental constraints affected performance of Medium Size Enterprises in Hawassa, Southern Ethiopia to a moderate extent, with mean value of 3.32 and standard Deviation of 0.096.

## Summary statistics of firms' characteristics in accessing of financing

## Regression analysis

A moderated regression analysis was conducted to

Table 10. Cronbach's alpha.

Cronbach's Alpha Based on Standardized Items	N of Items
0.748	7

#### Histogram

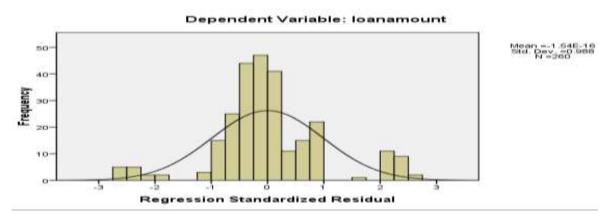


Figure 5. Histogram and P-P Plot used.

explore the effect of Firms' Characteristics (Age, Size, Collateral, Business Information, Type of Business and Legal Status of firms) in Accessing of Finance by Micro, Small and Medium Enterprises located in Hawassa, Southern Ethiopia. Regression analysis was conducted using Statistical Package for Social Sciences (SPSS) software.

### Data reliability test

As a measure of reliability test for Likert-scale questionnaires used in the current study, Cronbach's Alpha was used. A reliability co-efficient of  $\alpha \ge 0.7$  was considered adequate. In this case, a reliability co-efficient of 0.748 was registered indicating a high level of internal consistency for the Likert scale used as shown in Table 10.

## Data normality test

To test that the dependent variable is approximately normally distributed for each category of the independent variable Histogram and P-P Plot were used. The Histogram should have the approximate shape of a normal curve. In this case, the histogram has approximately a normal curve (Figure 5). In the P-P Plot the dot should be along the line. In our case the dots are

streamed along the line. This revealed that, the data are approximately normally distributed (Figure 6).

#### Model summary

The Model Summary is shown in Table 11. The "R" value is used to designate the strength and direction of the relationship between the variables. The closer the value gets to 1, the stronger the relationship. In this case as shown in model 1 in Table11, above R= 0.761. This means there was an overall strong and positive relationship between the variables. The R-Square in the study was found to be 0.579. This value indicates that the independent variables (Age, Size, Collateral, Business Information, Type of Business and Legal Status of firms) can explain 57.9% of the variance in the Credit Access by MSMEs businesses in Hawassa City, Ethiopia.

## Coefficients of determination

The Unstandardized Coefficients of determination under the B column in Table 12 were used to substitute the unknown beta values of the regression model. The beta values indicated the direction of the relationship. A positive or negative sign indicates the nature of the relationship. The significant values (p-value) under sig. column indicate the statistical significance of the

#### Normal P-P Plot of Regression Standardized Residual

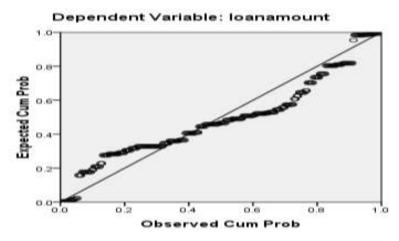


Figure 6. Normal P-P Plot of regression standard residual.

relationship or the probability of the model giving a wrong prediction. A p-value of less than 0.05 is recommended as it signifies a high degree of confidence. In our case, all the explanatory variables except Legal Status of Business Enterprises (p= 0.880) produced statistically significant results p< 0.05: Age of Business Enterprise (p= 0.000), Size of Enterprises (p= 0.003), Collateral (p= 0.024), Business Information (p= 0.000), and Type of Business (p= 0.039). The Equation for the Regression Model is expressed as:

Credit Access =  $\alpha i + \beta_1 Age + \beta_2 Size + \beta_3 Collt + \beta_4 Binfo + \beta_5 type + \beta_6 Legals + ui$ Credit Access = -0.136+ 0.102Age+0.117Size + 0.112Collt+0.433 Binfo + 0.046 type +0.006Legals +

0.112Collt+0.433 Binfo + 0.046 type +( *ui*......Q3.

Where: Credit Access = Credit access by a firm αi = constant

Age = Age of an Enterprise

Size = Size of Enterprise (measured by the number of employees)

Coll = the Collateral that an enterprise hold when applying for a loan

Binfo = Business information kept by an Enterprise

Type = Type of Business engaged in

Legals= Legal status of an Enterprise during the loan application

*Ui* = Residual values, which are any variables which may affect the dependent variable but not incorporated in this model/ Stochastic Error Term.

The results of the regression equation show that if all the predictor variables were rated zero, Credit Access by Micro Small and Medium Size Enterprises located in Hawassa City, Southern Ethiopia would be -0.136. However, all the predictors had a positive relationship

with the dependent variable. A unit increase in Age of Enterprise would lead to improved Credit Access by 0.102 while a unit increase in Size of Enterprises would increase Credit Access by 0.117. A unit increase in the Collateral an Enterprise holds when applying for a loan would improve Credit Access by 0.112. A unit increase in Business information kept by an Enterprise would lead to 0.433 improvements in Credit Access by MSMEs while a unit increase in Type of Business would lead to improved Credit Access of MSMEs by 0.046. A unit increase in Legal status of an Enterprise would lead to 0.006 improvements in Credit Access by MSMEs. The Stochastic Error Term was assumed to be zero.

## **Analysis of variance (ANOVA)**

As shown in Table13, ANOVA analysis was conducted to indicate the significance of the regression model. At 95% confidence interval, p-value of 0.0000 and F-value of 57.990 was registered as shown in Table 3. This indicates that, the regression model has a probability of less than 0.0000 of giving the wrong prediction. Hence, the regression model used above is a suitable prediction model for explaining the Impact of Firm Characteristics in Accessing of Finance by Micro, Small and Medium Size Enterprises Located in Hawassa City, Southern Ethiopia.

#### Conclusion

(i) The study has contributed to our knowledge on the series of factors associated with the firms' characteristics impacts on access to credit finance from different external sources of Financing Institutions in Hawassa City, Southern Ethiopia.

**Table 11.** The model summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		Change Statistics					
	R Square Change	F Change	df1	df2	Sig. F Change	R Square Change	F Change	df1	df2	Sig. F Change	
1	0.761(a)	0.579	0.569	0.32723	0.579	57.990	6	253	0.000	2.198	

a Predictors: (Constant), Legal Status, Age, Type Of Business, Collateral, Business Information, Size Predictors: (Constant), Legal Status, Age, Type Of Business, Collateral, Business Information, Size Dependent Variable: Credit Access

Table 12. Co-efficient of determination.

Mode	el		andardized efficients	Standardized coefficients	Т	Sig.	95% Con Interval			· linearity atistics
		В	Std. Error	Beta	Lower Bound	<b>Upper Bound</b>	Tolerance	VIF	В	Std. Error
1	(Constant)	-0.136	0.083		-1.634	0.104	-0.301	0.028		
	Age	0.102	0.013	0.495	7.955	0.000	0.077	0.127	0.429	2.331
	Size	0.117	0.039	0.180	2.968	0.003	0.195	0.039	0.452	2.214
	Collateral	0.112	0.049	0.107	2.271	0.024	0.015	0.210	0.747	1.338
	<b>Business Information</b>	0.433	0.053	0.434	8.235	0.000	0.329	0.536	0.598	1.672
	Type Of Business	0.046	0.022	0.090	2.071	0.039	0.002	0.090	0.888	1.126
	Legal Status	0.006	0.037	0.008	0.151	0.880	0.079	0.067	0.666	1.501

a Dependent Variable: Credit Access Source: own computation, 2016/2017.

Table 13: Analysis of variance.

ANOVA (b)						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	37.258	6	6.210	57.990	0.000(a)
	Residual	27.092	253	0.107		
	Total	64.350	259			

Predictors: (Constant), Legal Status, Age, Type Of Business, Collateral, Business Information, Size.

- (p=0.000), and Type of Business (p=0.039).
- (iii) All the explanatory variables (Industry of the Firm, location of the firm, firm size, firms' business information, age of the firm, Legal Status of the Firm (Incorporation) had a positive relationship with the dependent variable.
- (iv) In addition, in this study we sought to know the effect of other factors such as Marketing Constraints, Managerial Constraints and Environmental Constraints on the Performance of SMMEs. These marketing constraints affected the performance of Micro and Small Size Enterprises located in Hawassa, Ethiopia to a Great extent (mean value of 3.9, standard deviation of 1.07) and (mean value of 3.75, standard deviation of 1.2) respectively. Marketing constraint affects the performance of Medium Size Enterprises in Hawassa, Southern Ethiopia to a Moderate extent with mean of 2.63 and Standard deviation of 1.18.
- (v) Managerial constraints affected the performance of Micro Enterprises in Hawassa city, Southern Ethiopia to a great extent (*mean of* 3.93, *standard deviation of* 0.99), and the performance of Small Size Enterprises and Medium Size Enterprises to a Moderate extent (*mean of* 3.2493, *standard deviation of* 1.18) and (*mean of* 2.61, *standard deviation of* 1.23).
- (vi) Environmental constraints affected the performance of Micro and Small Size Enterprises located in Hawassa, Ethiopia to a great extent (*mean of* 4.12, *standard deviation of* 0.94) and (mean of 3.89, standard deviation of 1.10). While, the performance of Medium Size Enterprises was affected by these Environmental Constraints to a Moderate extent with mean value of 3.32 and standard deviation of 0.096.

#### RECOMMENDATIONS

The study forwards the following recommendations.

- (i) Government should formulate policies that will make sources of finance (Commercial Banks, Finance Companies, Micro Finance Institutions and other sources) relax their restrictive regulations and operations which discourage borrowing and offer more credit facilities for firms especially Micro and Small Size Enterprises.
- (ii) Government should support the MSMEs sector by guaranteeing them of financial institutions.
- (iii) The SMMEs operators should also improve their working environment using different devices like improving the quality of their products and services to compete with large industrial units, improve the skill of human power by providing different trainings.
- (iv) It also recommended that in order to obtain credit access from Financial Institutions, MSMEs operators should maintain attractive firms' attributes to stimulate lenders to extend debt finance to their investments.
- (v) The government should safeguard MSMEs against 'Bureaucratic Discretions' and also improve the presumptive tax system which is adopted in order to

collect tax from Micro Enterprises particularly.

(vi) To support MSMEs in their efforts to expand businesses, governments and other stakeholders should facilitate market linkage for manufacturers, particularly.

### **CONFLICT OF INTERESTS**

The authors have not declared any conflict of interests.

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