ISSN: 0975-833X

Available online at http://www.journalcra.com

International Journal of Current Research
Vol. 8, Issue, 12, pp.43177-43186, December, 2016

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

RESEARCH ARTICLE

DETERMINANTS OF EMPLOYMENT GROWTH OF MICRO AND SMALL ENTERPRISES IN WOLAITA ZONE, ETHIOPIA

[1,*]TekleLeza, [2]Sundaraa Rajan and [3]Berhanu Kuma

[1]Department of Rural Development and Agricultural Extension, Ph.Din Livelihood and Poverty Reduction, Wolaita Sodo University, P.O.Box, 138, Wolaita Sodo, Ethiopia
[2]Department of Rural Development and Agricultural Extension, Livelihood and Poverty Reduction, Wolaita Sodo University, P.O.Box, 138, Wolaita Sodo, Ethiopia
[3]Department of Agricultural Economics, Wolaita Sodo University, P.O.Box, 138, Wolaita Sodo, Ethiopia

ARTICLE INFO

Article History:
Received 25th September, 2016
Received in revised form
22nd October, 2016
Accepted 11th November, 2016
Published online 30th December, 2016

Key words:

Micro
and Small enterprises,
Multiple Linear Regressions,
Wolaita,
Ethiopia.

ABSTRACT

This study aimed at investigating determinants of employment growth among MSEs in Wolaita Zone, Ethiopia. Multi-stage sampling technique was employed to select 352 enterprises by using Yamane (1967) formula with 5 per cent precision and 95 per cent confident level. Data were collected using interview schedule through face-to-face interview and observation, key informant interview, focus group discussion and data analysis were carried out by using descriptive and inferential analyses as well as econometric models. The econometrics result indicated that age the promoters, education, previous work experience, risk taking, achievement motivation, age of enterprises, managerial training, size enterprises, access to finance, start-up capital, access to infrastructure, access to premises, social networks, vertical and horizontal linkages, and supporting markets of enterprises were included for analysis. Both size and age of the enterprises were negatively determined employment growth. This gives evidence that smaller and younger MSEs grow faster than older ones. Moreover, enterprises which are engaged in access to finance, education and promoters training were positively and significantly determined employment growth whereas supporting market, physical infrastructure and Vertical linkage determined employment growth negatively and significantly. Social networks can help promoters identify business opportunities as well as overcome a number of obstacles related to transaction costs, contract enforcement, and regulation determined employment growth positively and significantly. Promoting inter-firm and Buyers/Sellers cooperation, enhancing share capital contribution, enhancing micro-financing efficiency, improving infrastructural facilities such as information dissemination, educating and training of MSEs promoters in business development services (BDS) were recommended to enhance employment growth of MSEs.

Citation: TekleLeza, Sundaraa Rajan and Berhanu Kuma, 2016. "Determinants of employment growth of micro and small enterprises in Wolaita zone, Ethiopia", *International Journal of Current Research,* 8, (12), 43177-43186.

INTRODUCTION

The mounting poverty level in developing countries is posing formidable threat to the very existence and sustainability of the economies. The poverty indicators such as, low Gross Domestic Product (GDP) per capita, life expectancy, educational enrolment, and people living below $1.25 a day and low nutrition, and the like are disturbing factors. Various development programmes are underway in developing countries to alleviate poverty. Micro and Small-scale Enterprises (MSEs) play a pivotal role in the socio-economic development and growth of nations. MSEs have greater economic benefits than large firms in terms of employment generation and growth since they use more of what a country is endowed with and less of what it lacks (Admassie and Matambalya, 2002; Habtamu *et al.*, 2013). Unlike large-scale enterprises, which are often capital-intensive and import-dependent for raw materials and machinery, MSEs mostly use locally available resources. By creating employment opportunities for the semi-skilled and unskilled labor, MSEs could increase the household income of the labor force at the micro level and reduce the level of poverty at the macro level, apart from creating the basis for a more sustained industrial development. Moreover, MSEs' nurture of indigenous entrepreneurial and managerial talents which foster economic development, poverty reduction and employment generation (Eshetu and Zeleke, 2008). Needless to say that promoting

Corresponding author: TekleLeza,
Department of Rural Development and Agricultural Extension, Ph.Din Livelihood and Poverty Reduction, Wolaita Sodo University, P.O.Box, 138, Wolaita Sodo, Ethiopia.

MSEs has become a preferred development strategy in many developing countries. Statistics reveal the facts about concrete contribution of MSEs to the country of developing countries. Micro and small enterprises as well as medium enterprises account for about 30 per cent of employment and 17 per cent of GDP (Beck and Demirguc-kunt, 2005). In developed countries, the share of the enterprises is even larger; about on average 50 per cent to GDP and about 60 per cent to employment. As economies grow, the share and contribution of MSEs towards the economies of developing countries will increase. In these economies, the expansion of these enterprises is significantly important as they are closely associated to the livelihoods of the poor and disadvantaged groups that include women and youth (Robu, 2013). The MSEs in Ethiopia contributes to about 3.4 per cent of the GDP, about 33 per cent of the overall industrial production and 52 per cent of the manufacturing output (Habtamu *et al.*, 2013). Government of Ethiopia has acknowledged the role of these enterprises in the economic growth and transformation. The Growth and Transformation Plan (GTP I), for instance, has envisaged that micro and small scale enterprises create employment opportunities for about three million people and thereby enhance household income, domestic saving, reduce unemployment and poverty, particularly benefiting the women and the youth (MoFED, 2014).

A nationwide urban sector survey conducted by the Central Statistical Agency in (1999) shows that the MSEs created employment opportunities to about 1.15 million people which account for about 50.6 per cent of the 2.88 million total urban employments. The agency's survey in 2007 indicates that more than 1.30 million people in the country are engaged in MSE sector. A survey conducted by FeMSEA, (2015) on GTP I performance showed that more than 407,269 registered enterprises together created job opportunities for 4.23 million urban populations. Sustainable development strategies for MSEs are evolved after systematic analysis of the problems and appropriate solutions. MSEs in Ethiopia, however, suffer from limitations. Among others, insufficient training and technical know-how were the major ones affecting performance of MSEs (Werotaw, 2010). In general, there are external and internal factors which impair the performance of MSEs.The key challenges to the long term survival and growth of MSEs are lack of basic entrepreneurial and managerial skills, poor efficiency, adopting of business best practices, lack of access to finance, and information asymmetry between bankers and MSE community and the risk profile of the sector (MUCD, 2013). The commercial banks and formal financial institutions are reluctant to provide finance to small businesses due to managerial inefficiency and lack of accurate information required for assessing the risk of lending money to small businesses (Eshetu and Zeleke, 2009). Research findings of Amha and Ageba (2006) which focused on MSEs in major urban centers of Ethiopia revealed that access to markets and finance are the most pressing constraints of the sectors. This impairs employment and poverty reduction potential of MSE sector. The above facts have been corroborated by recent research studies as well. The study conducted by Habtamu *et al.* (2013) reveals that large numbers of MSEs are unable to grow, in terms of employment and capital and remain in survival-mode. Moreover, out of 1000 MSEs in the country around 69 per cent were found to be survival-types (Gebreeyesus, 2007) that too in the capital city of Addis Ababa. Around 76 per cent of the MSEs are unable to grow at all since their establishment and only 22 per cent of the MSEs increased their work force (Wasihun and Paul, 2010). Field observations of the researcher besides his professional experiences, and Trade and Industry statistical abstract showed that MSEs at Wolaita Zone continue to be capital-starved and remain low in their job creation potential. Furthermore, the Zone has not yet exploited their potential very well to contribute towards economic development, job creation and poverty reduction. Their contribution to the local economy, capital accumulation and employment generation remains much low.A few studies probed the issue of MSEs in Ethiopia. Belay (2012) analyzed determinants of microenterprises success in the urban informal sector of Addis Ababa, Ethiopia using multi-dimensional analyses and Fikirte and Enderias (2013) emphasized the growth and diversification of MSEs in Dire Dawa city of Ethiopia. However, there are a number of features which make the present study different from the existing a few empirical studies. First, unlike this study, a few number of the studies addressed the issue of MSEs growth but as far as knowledge of the researcher goes none of the aforementioned research studies addressed the issue of MSEs growth by employing econometric technique. Secondly, this study reckons demand and supply side factors across location and sector characteristics.

The effectiveness of above interventions, however, depends on identifying key factors that foster or inhibit growth of MSEs. MSEs are heterogeneous in objective, capability and competencies. They differ in terms of the promoters and firms' socioeconomic background, access to scale economies and financial resources. Understanding the different factors determining employment growth is crucial in order to formulate effective policies. Therefore, this study is designed to unpack the issue of growth of MSEs and factors determine them in the study area. This paper was organized into four parts. The first part presents introduction. The second part describes methodology used to achieve the objectives. The third part presents results and discusses findings in which annual average growth and Multiple Linear Regression model results were used. The last part includes recommendations towards policy implementation.

RESEARCH METHODOLOGY

Description of Study Area

Wolaita Zone is one of 14 zones in *Southern Nations, Nationalities and Peoples' Region (SNNPR) of Ethiopia*. The capital of the Zone, *Sodo town*, is situated at 378 km to south of *Addis Ababa* city, the capital of Ethiopia. According to Central Statistical Authority (CSA, 2007) estimated population projection of the Zone is 1,796,578out of which 49.27 per cent are males and 50.73 per cent are females. The population density of the Zone is 445 persons per Km^2. The average urban household size was 4.8. The total geographical area of the Zone is 4,541Km^2. Micro and Small Enterprises (MSEs) played an important role in creating income and employment opportunities that have bearing on poverty reduction. The Zone has 2548 Micro and 192 Small Enterprises established during 1997-2005 that include all economic sectors. Similarly the sector comprised of different economic sub sectors i.e. manufacture 357(13.1 per cent), construction 814(29.7 per cent), Trade 748(27.3 per cent), service 612(22.3 per cent) and urban agriculture 209(7.6 per cent). These sectors created jobs for 16,191 people in the study area.

Sampling Technique

Multistage sampling technique was employed for selection of the representatives of MSEs. At the first stage, Wolaita Zone was purposively selected as the largest number of MSEs present in the Zone. Besides, Wolaita Zone has unexploited potential that could definitely serve as business area for MSEs. Further, Wolaita Zone is the catchment area for the research and development program of WolaitaSodo University. At the second stage, three towns were selected purposively from the target Zone as of the largest numbers of MSEs and members present there. At the third stage of sampling design, stratified random sampling technique was used to select the samplingunits for study from the study area. The use of stratified random sampling technique was justified on the ground that the population of interest is heterogeneous; hence, it is necessary to classify the population of interest into non-overlapping elements or strata. The heterogeneous population of interest in each town is divided into two strata, viz. both MSE together, Micro and Small Enterprises that were major components of MSEs in the study area.

Sample Size Determination

To determine appropriate sample size simplified formula which was developed by Yamane (1967) was used.

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

Where, assume n=required sample size; e =degree of accuracy expressed as a proportion of (0.05); and *N*= total population of MSEs in the division. The required sample size was computed from the population frame of 790 and 112 Micro and Small enterprises respectively present in the study area. Eventually, 265 and 87 from micro and small enterprises were selectedrespectively by using the sample size determination formula.

Proportional allocation procedure was used to determine the sample size of each stratum. The total sample size from micro-enterprise was proportionally distributed to each administrative town based on the multiplication factor (265/790= 0.335) whereby the numbers of active town are multiplied to provide the proportional sample sizeis 265 micro enterprises. From 265 micro-enterprises (37 from Boditi, 177 from Sodo, and 51 from Areka) and similarly, sample size from small-enterprises were again proportionally distributed to each administrative town based on the multiplication factor (87/112= 0.776) whereby the numbers of active towns are multiplied to provide the proportional sample sizeis 87 small-enterprises (18 from Boditi, 51 from Sodo, and 18 from Areka) were proportionally selected from each administrative town is multiplied to provide the proportionate sample size. Accordingly, the total sample proportionally selected was 352 (228 from Sodo, 69 from Areka and 55 from Boditi). Finally, systematic sampling technique (K= N/n) formula was employed to draw each enterprise from each sector.

Data Sources and Methods of Data Collection

Both qualitative and quantitative data were collected from primary and secondary sources. Quantitative data from primary sources were collected through interview schedule while qualitative data were collected through interview schedule through face-to-face interview, focus group discussion, key informant interview and personal observations. The relevant data were collected from 352 sample promoters. An interview schedule was prepared in English and translated into Amharic to ease communication during the data collection. The interview-schedule was pre-tested before actual data collection and necessary corrections were made in the final version of interview-schedule. Five enumerators were recruited based on their proficiency in local language, educational background and prior exposure to survey research. Training was given to enumerators on the content of the interview schedule and procedures to follow while conducting interview. The survey focused on socioeconomic, individual and firm related, institutional and linkage related factors. Secondary data were collected from *Wolaita* Zone trade and industry promotional department, Micro finance institution, Journals, and Central Statistical Authority (CSA) publications, published and unpublished documents of national, regional and zonal offices.

Method of Data Analysis

Model Specification

This studyhad explored a number of factors which had been related to employment growth of MSEs. The employment growths determinefactors such as individual and firm related factors, social networks, and inter-firm cooperation and the firm support of market were considered in this regard. The dependent variable was the change in the number of employment in specific period of time. For the measurement of employment growth of MSEs which is dependent variable, annual average growth method was employed and for the regression analysis multiple linear models was used. The growth model was provided by Evans (1987) and that was adopted in several studies. Depending on the data set either of the following parameters employment, sales, profits, fixed asset or capital stock to measure firms' growth. This study used firms' employmentas an indicator to capture growth. Hagos*et al., (*2014) used similar approach to measure growth indicator in employment was used. Employment growth can be measured by taking the difference in employment between the start of operation and the current situation.

Employment growth

$$=\text{Gr} = \frac{lnSt' - lnSt}{AGE} \quad \text{..... (2)}$$

Where, lnSt', is firm's log of current employment, and lnSt, is firm's log of initial employment, AGE is the age of MSEs and G_r is the latent variable indicates the growth rate of the enterprises.

In the studies of firm growth, researchers often use three kinds of econometric models to estimate significant factors that affect growth, such as multinomial Logit model, Logistic or probitregression model and multiple linear regression models. In multiple linear regression model, the dependent variable is explained by means of a set of independent variables. In this analysis, a multiple linear regression analysis was used to test whether or not the key independent variables determine the dependent variable. In this study multiple linear regressions was employed as the dependent of the study (Gr), which is the employment growth of MSEs,is of continuous nature. Multiple linear Regressions were deployed to examine the relationship

of several hypothesized variables with the employment growth. Age of promoters, age of the enterprises, promoters education, previous work experience, risk taking, achievement motivation, sector type, MSEs size, access to finance, amount of initial capital, infrastructure, social networks, vertical and horizontal linkages, and supporting markets were included in the analysis. While dealing with the above independent variables, Multicolinearity among them to precisely gauge the individual effect of the independent variables on the dependent variables was ruled out. Multicollinearity is possible correlation that may exist among explanatory variables, making the coefficient estimates unreliable. Variance of Inflation Factor (VIF) and Tolerance are two important measures that can detect multicolinearity in a regression model (Wooldridge, 2002). The general Multiple Linear Regression modelwas specified as:

$$G_r = \frac{lnSt' - lnSt}{A} = \beta_0 + \sum_{i=1}^{j} \beta_i X'_i + U_{ij} \quad i = j = 16 \text{ ---------- (3)}$$

Where, β_0 = the intercept, $\beta_{1=}$the coefficient of $X_{i,}$ U_{ij}= error terms, G_r = Growth

RESULTS AND DISCUSSION

Descriptive Analysis

Promoters' Education: promoters' education is supposed to determine the enterprises employment growth. Education being the basic human endowment would enhance the promoters' access to new information and their ability to process such information resulting in efficient production and distribution of goods and services. About 79 per cent of respondents completed either secondary (9-12 Grades) and /or vocational (such as TVET) education. Education of Micro and Small Enterprises promoters was analyzed separately revealed similar pattern. The fact that less proportion (10 per cent) of promoters had attained tertiary education could be the pointer to the weak education system to prepare the graduates for self-employment. In addition, this also might indicate the lower propensity of potential entrepreneurs to pursue higher education that the Test of Independence ($\chi 2$) applied to distribution of Micro and Small enterprise promoters across against their level of education yielded significant value at less than1 per cent level ($\chi 2$= 11.92; p=0.001), demonstrating the relation between the level of education of promoters and their choice of enterprise (Micro /Small). Belay (2012) had shown positive impacts of education over the entrepreneurs in terms of their marketing ability, business judgment, exposure to new technology, exploiting opportunities resulting in business longevity and growth. (Table 2)

Access to working Premises: Access to suitable working place is the most important factor for MSEs growth and expansion. According to Fred (2003), access to individual land has been a major factor in MSE growth and expansion. All in all, 56 per cent of the MSEs had some piece of working space to operate had working place allotted by the Government (Table 2). The remaining 44 per cent of MSEs obtained their working space from different sources. About 33 percent of MSEs had working place rented from private owners, 9 percent had inherited their working place and 2 per cent obtained from other source including civic society organization (CSO). In the investigation it was clear that business operating in premises allotted by the government agencies had better chance of survival compared to those set up in privately rented premises. Besides, the Government premises remained undisturbed for longer periods unlike private premises being liable for frequent shifting after expiry of one/two brief lease periods, involving high relocation costs to the owners. Private premises in general were reported to be inaccessible to road and utilities causing inconveniences to the owners and the customers. The chi-square test revealed that micro and small enterprises had significant difference at less than one per cent level in terms of availability of the business premises ($\chi 2$ =8.66, p= 0.003).

Age of Promoter: Age of the MSEs promoter has bearing on employment growth ambition, determination, and willingness to test abilities and in turn on the MSEs'employment growth (Welter, 2001 and Fikirite ;Endrias, 2013). The result indicated (Table 3) that youth dominated the sector. The average age of the respondents in Micro, Small and both enterprises was 33.6, 32.9 and 33.3 years respectively. MSEs Strategy of Ethiopia (2011) lays emphasis on supporting youth coming forward to set up enterprises. The average age profile of the respondents appeared to be in line with the objective of the MSE policy. It was also worth noting that some promoters were over 50 of age, evidencing the richer experience behind them. The average age of promoters had significant difference on Micro and Small enterprises at less than one per cent significant level (t = 88.89; p=0.000).

Promoters Training: Eshetu and Zeleke (2008) had argued that entrepreneurship training was an important input for enterprise growth. It not only familiarized entrepreneurs with process and organizational function but also helped entrepreneurs to establish network with suppliers and buyers. As presented in Table 2 the duration of annual average training given to micro, small and both enterprises promoter was 2.2, 2.31and 2.24 months respectively. However, our data clearly revealed that duration of training provided for the workers and promoters was inadequate efficiently to manage enterprise, as ascertained through responses of Focus Group Discussion. The results reiterate the concerns expressed by MTI, (1997) and MUCD, (2013) level of training was made available to MSEs. The lack of training institutions adequately equipped for training MSEs was the key reason for the poor performance of the MSEs sector (Gebyehu and Assefa,2004 ; MUCD,2013). The t-test revealed that average training provided for promoters had significant difference between micro and small enterprises at less than one per cent significant level (t =22.79, p= 0.000). The result of this finding was in line with that of Eshetu and Zeleke, (2008) and MUCD, (2013) who studied formal Micro and Small enterprises in major cities of Ethiopia.

Start-Up Capital

Many MSEs started operations with very low amount of initial capital. Majority of the operators were 'Necessity' promoters (pushed to start enterprises out of sheer poverty/economic necessity) rather than 'Opportunity' promoters. Over the time, some promoters turn the small units into more profitable ones. The average startup capital for sampled enterprises was 20,685 Birr (See Table 3). Perhaps owing to inflation and location of the studies and choice of the sector investigated the startup capital value found by earlier researchers, by Belay, (2012) was 6830 Birr. About 48 percent of the MSEs had initial capital of over 20,000 Birr (see Table 3). The t-test revealed that the variable had significant difference on micro and small enterprises at less than one per cent level (t =23.939, p= 0.000). The finding is consonant with that of (Belay, 2012 and ILO, 2003).

Table 1. Independent Variables and their Expected Sign (Growth Estimates)

Variable Code	Description and measurements	Exp. Sign
LN(AGE)	Age of Promoters measured in years	-
LN(INCAP)	Amount of Initial capital (in Birr)	+
EDUCCD	Categorical (1=illiterate, 2=elementary, 3=secondary 4=vocational 5=university)	+
LN(MTRID)	Duration of skill training provided for Promoters (in months)	+
SNET	Social network that possessed by MSE (1= MSEs accessed the social network and 0= otherwise)	+
AFIND	MSEs owners accesses to Finance (1= if accessed and 0 otherwise)	+
INFRA	Infrastructural facilities taken as taken as 1= Low, 2= Medium and 3= high	+
PERM	Working premises (1= if MSE owner having working premises and 0 otherwise)	+
SMKT	Supporting market (1= if the MSEs owner receive support and 0 otherwise	+
LOC	Location of the MSEs (1= if chosen commercial area and 0 otherwise)	+
LN(AGEF)	Age of the MSEs measured in years	-
LN(FSIZE)	The size of the MSEs measured in number of employees	-
VLNK	Vertical linkage, dummy (if 1= having vertical linkage and 0 otherwise	+
HLNK	Horizontal linkage, dummy (if 1= having horizontal linkage and 0 otherwise	+
RTP	Promoters risk taking behavior taken as 1= Low, 2= Medium and 3= high	-
NAMO	Promoters achievement motivation taken as 1= Low, 2= Medium and 3= high	+

Table 2. Personal Characteristics of Enterprise Promoters

Variables		Micro (n=265) Freq(%)	Small (n=87) Freq(%)	Total (n=352) Freq(%)	$\chi 2$ test
Education	1-8	33(12)	5(6)	38(11)	11.92*
	9-12	117(45)	26(30)	143(41)	**
	Vocational	96(36)	40(46)	136(38)	
	University	19(7)	16(18)	35(10)	
	Total	265(100)	87(100)	352(100)	
Access to Premises (%)	Yes	56	44	61	8.66**
	No	34	56	39	*

n=Sample size, *** indicates that statistically significant difference between sectors at less than 1% significant level.
Source; competed from field survey from 2015/16

Table 3. Distribution of MSEs based on Enterprise Characteristics (n=352)

Variables	Micro (n=265)	Small (n=87)	Total (n=352)	t value
Startup/Initial capital(Birr)	17991(13100)	28890(21300)	20685(16210)	23.939***
Age of Promoters	33.6(0.42)	32.98(0.70)	33.3(0.67)	88.48***
Promoters training	2.22(1.27)	2.31(1.23)	2.24(1.26)	22.79***

n=Sample size, *** indicates that statistically significant difference between sectors at less than 1% significant level.
Source; competed from field survey from 2015/16. N.B.1USD= 22.64 Ethiopian Birr during time of data collection.

Table 4. Employment growth by MSE Worker size, Age and Sector

Variables	Category	Employment at start	Employment at current	Annual average growth (%)
Enterprises Size	1-2 workers	195	66	-13.6
	3-4 workers	416	414	-1
	5-6 workers	459	785	14.9
	>=7 workers	21	427	40.7
	Total	1091	1692	11.5
Age	3	111	210	18.7
	4	427	663	11.6
	5	239	344	9.2
	6	190	268	8.6
	7	124	207	14
	Total	1091	1692	11.5

Source: computed from field survey data, 2015/16

Table 5. MSE Progression across Worker size Categories

		Size in 2001-2015				
	Size at Start up	1-2 worker	3-4 workers	5-6 workers	>7	Total
Size category	1-2 workers	48(25)	90(46)	44(23)	13(6)	195(100)
	3-4 workers	-	141(34)	238(57)	41(9)	418(100)
	5-6 workers	-	60(13)	256(56)	143(31)	457(100)
	>7 workers	-	-	-	21(100)	21(100)
	Total	48	291	538	218	1091(100)

Source: computed from field survey data, 2015/16 the figures in parenthesis are percentages.

Table 6 Determinants of Employment Growth

Variables	Both MSE altogether (n=352)		Micro Enterprises category (n=265)		Small Enterprises category(n=87)	
	Coef	robust se.	Coef	robust se.	Coef	robust se.
LN(AGE)	-0.031	0.039	-0.024	0.042	-0.113	0.103
LN(INTCAP)	0.006	0.009	0.007	0.012	-0.004	0.019
LN(FSIZE)	-0.046***	0.004	-0.047***	0.005	-0.051***	0.011
LN(AGEF)	-0.072***	0.026	-0.094***	0.029	-0.016	0.065
EDUCDC	0.016*	0.010	0.002	0.012	0.038**	0.022
LN(MTRIAD)	0.028*	0.015	0.041**	0.019	0.046**	0.017
NAMO	-0.0195	0.055	-0.050	0.065	0.064	0.136
RTP	-0.085	0.055	-0.040	0.051	-0.119	0.088
INFRA	-0.014	0.037	-0.012	0.041	- 0.091*	0.089
LOC	0.005	0.015	0.007	0.017	0.020	0.038
PREMD	-0.002	0.014	-0.005	0.014	-0.045	0.036
AFIND	0.048**	0.019	0.006	0.016	- 0.017	0.036
VLNK	-0.036**	0.015	-0.032*	0.016	-0.042	0.035
SMKT	-0.060**	0.028	-0.066**	0.028	-0.092	0.085
HLNK	-0.0002	0.014	-0.005	0.015	-0.022	0.038
SNETD	0.008**	0.003		0.009		
CONS	0.650***	0.215	0.666***	0.228	1.148*	0.579
	Prob>F	0.0000	Prob>F	0.0000	Prob>F	0.0008
	R-squared	0.339	R-squared	0.60	R-squared	0.435
	F(16,335)	10.73	F(16,248)	10.61	F(16,70)	2.28

Enterprise Characteristics and Employment Growth

A number of previous research studies tried to establish the relationship between employment growths with enterprise size and age. Stochastic nature of the enterprises growth as advocated by Gibrar's law does not make any analyst to assume any relationship between employment growth and other MSEs attributes. This assertion has been disproved by many studies. Jovanovic (1982), Bigsten and Gebreeyesus (2007) studied the growth of Ethiopian medium and large manufacturing industries using a panel data and found that there was a systematic relationship between manufacturing industries growth and its attributes such as age and size of enterprises. The above mentioned authors found out that younger and smaller enterprises grew faster. In the present study enterprises were categorized into age and size groups following the methodology of Liedholm (2008) and Bigsten and Gebreeyesus (2007) and Belay (2012). With similar procedure following the above authors, Table 4 displays the employment at start, current employment, and growth by across different enterprise characteristics. The total number of employment in the sample establishments rose from 1091 when start to 1692 current, and this was 55.2 per cent growth for the entire duration in their business. Dividing the absolute growth of employment of each MSEs to the average number of years in business gives annual average growth of 11.5 per cent since start-up. This finding is comparable to that of MSEs employment growth in five African countries, including Kenya as reported by Liedholm (2008). The annual average growth rate of Botswana, Swaziland and Zimbabwe were 8.4, 6.6 and 10.5 per cent respectively (Gebreeyesus, 2007 and Minilek and Chinnan, 2012). The study further reckoned average annual growth by age group. The younger establishments with 5 and fewer years old have grown by about 12 per cent annual average. MSEs Employment growth decreased with age of the enterprises. The negative relationship between employment growth versus enterprises size and age served as evidence for the learning process argued by Jovanovich (1982).

MSE Progression across employment size Categories

It may be of interest to stakeholders to know the businesses progression - growth movement of enterprises across different size slabs/ categories. The measure indicates the percentage of enterprises belonging to a particular size (of workers) category in the year 2016 (year of the present study) compared to the year of commencement of business. Though the measure suffered from the limitation of reckoning varying startup years among the MSEs, it did throw light on the progression made by the MSEs. Table 5 displays the transition of the establishments across size categories. The four categories were 1-2 workers, 3-4 workers, 5-6 and greater or equals to 7 workers. In general, 25 per cent of the enterprise, did not progress in terms of size ever since they were set up till 2015/2016. However, about 46 per cent of enterprises that start with (1-2) grew to the next size class (3-4) workers and 6 per cent to the higher size class (6 and above) workers. Similar study was conducted by Cabral and Mata (2003) and Gebreeyesus (2007).

Determinants of Employment Growth - Econometric Results

Validity of the Estimates of Employment Growth: In the regression the dependent variables was a continuous one. The models so constructed was fit enough to explain the variation in the dependent variables. As suggested by Wooldridge, 2000, $R^2$was calculated to establish the fit of the model. This test tells us the degree to which our model was able to explain the variation in the dependent variable (employment growth). The table shows that (R^2=0.339, 0.60 and 0.435) in both, micro and small enterprises respectively), implying that our model has fairly explained the variation in the response variable (Table 6). Multicolliniarity indicator- VIF ranged from 1.15 to 1.69 and Tolerance index ranged from 0.895 to 0.589. It thus suggested that regression coefficients did not suffer from multicolinearity among the independent variables. Normality of the residuals was also reckoned in the analysis. Jarque - Bera Normality Test on the residuals disclosed the fact that the residuals were not normally distributed. Without the assumption of normal distribution of error terms (residuals) statistics derived for testing hypothesis would be misleading. However, given the large sample (352) used in the study the distributions of F, t and $\chi 2$ would approach normal distribution, making the inference reliable. Moreover, the values inferred under these distributions were mere

approximations rather than precise estimates. Approximations approach actual values as the sample size increases (Greene, 2003). An 'F Test' on joint significance of co-efficient estimates gave a p-value of zero indicating the significant.

Age of the Enterprises LN (AGEF): The employment growth was negatively affected by the age of the enterprise at less than one per cent significant level for both MSEs together and Micro enterprises category respectively. The result indicates that one year increaseenterpriseage would decrease the employment growth by 0.072 and 0.094 both MSEs together and micro enterprises respectively while keeping all others variables remains constant. This was perhaps due to the fact that younger enterprises would grow faster than larger and older ones. Innovations in technology adoption and aggressive growth ambitions among younger ones would be associated reasons. In addition, older entrepreneurs and their enterprises would be risk averse, resulting in slower growth. These provide sufficient evidence that age of the enterprises and growth are negatively related. Jovanovich (1982) had elaborated on the tendency of mature enterprises to be wary of costs and austerity measures undertaken by them thereby making them to have sustainable growth rather than faster growth. This gives evidence that smaller and younger MSEs grow faster than large firms, and consistent with the learning hypothesis but contrary to the Gibrat's law. The study results were consistent with those of Bigistonand Gebreeyesus, (2007); Gebreeyesus, (2009) and Evans, (1987).

Size Enterprises LN (FSIZE): The employment growth was negatively and significantly affected by the size of the enterprises at less than one per cent significant levelsfor both MSEs together as well as Micro and Small category respectively. The result indicated that one employee increasein an enterprise would decrease employment growth by 0.046, 0.047 and 0.051 for both MSEs together as well as Micro and Small category respectively ceteris paribus.Thenegative relation between enterprises growth and size might be due to sub optimal use of resources found among enterprises Gebreeyesus, (2007). Idle resources were common as a consequence of their indivisibility. The extent to which enterprise can employ the most advantageous division of labour depends on the scale of its operation; the smaller its output the less can resource is used in specialized manner. The smaller enterprises have the greater the indivisibility of resources and slack resources, thus higher incentive to expand. Labor size, in particular, has a statistically negative impact on enterprise growth although it has a stimulating effect on enterprise likelihood to growth. Stochastic theory of Gibrat's law propounds that growth is independent of size. However, Jovanovich (1982) had elaborated on the tendency of mature enterprises to be wary of costs and austerity measures undertaken by them thereby making them to have sustainable growth.The empirical literature, including the present study shows that negative relation between growth and enterprise size (Evans, (1987) and Gebreeyesus, (2009) and Bigston and Gebreeyesus (2007).

Education (EDUCCD): Contrary to expectation, employment growth was negatively and significantly affected by education at less than 10 per cent significant level in both MSEs together and small enterprises category respectively. A unit change inpromoter's education would increaseemployment growth by 0.016 and 0.002 for both MSEs together and small enterprises category respectively while assuming all other variables remain constant. This implies that educated people show higher tendencies to become entrepreneurs.The role of education on enterprise growth is explained through its effect on exposure to new information and processing of this new information, which has an ultimate positive impact on production and/or distribution of goods and services. This statement was supported by Bates (1990) advocates the positive impacts of education through its effect on making good business judgments, exposure to new technology, exploiting opportunities well and thereby contributing to business longevity and success. The study was consistent with Belay, (2012); Bigiston and Gebreeyesus, (2007); World Bank, (2007).

Access to finance (AFIND): Access to finance was positively and significantly determined employment growth at less than 5 per cent significant levelsboth MSEs together category. A unit increase in accessing of finance would increase employment growth by 0.048 for both MSEs together categories while keeping all other variables remains constant. This implies that enterprises which have access to finance grew better. According to Solomon (2004), MSEs which have access to finance grew better than those which have shortage of capital or credit and solving this problem leads to solution of capital shortage and MSEs growth. However, in the study area, MSEs face various challenges in securing finance. Lack of collateral has been the principal reason affecting the small MSEs depriving them of finance. The formal financial institutions shy away from MSEs for several other reasons including lack of track record of MSEs, patchy record keeping, high cost involved in serving unorganized for MSEs, etc. The result was in line with findings of Gebreeyesus, (2009); Cabral and Meta, (2003); Solomon (2004) Eshetu and Zeleke, (2009).

Vertical linkages (VLNK): Employment growth was negatively affected by vertical linkage of the MSEs at less than 5 and 10 per cent significant level in both MSEs together and micro enterprises category respectively. Keeping all others variables remain constant, the result indicted that a change in the dummy variable representing vertical linkage of supplier's relationship to buyers from 0 to 1 would decrease the employment growth by 0.036 and 0.032for both MSEs together and micro enterprises category respectively. The implication of the result is that there could be strong competition among MSEs therefore has the inclination to stay away from it for the purse of the buyer at the same time. MSEs had apparent negative perception about vertical linkage and they could not visualize the advantages of such linkage. They saw the linkage as competition and fear of losing opportunities to the competitors made them to stay away from linkages. Lack of trust among MSEs was found to be the principal cause of such a stand. This pessimistic view of MSE operators was likely to deprive them of all advantage of vertical linkages and cooperative relationships. This was the serious challenge to the culture of business cooperation. Similar observation was made as part of descriptive analysis of this study also. The study result was consistent with that of (Belay, 2012; Gebreeyesus, (2009) and Evans, (1987) and was contrary to the findings of Fikirte and Endrias (2013); Berhanu, (2014).

Social networks (SNET): The employment growth was positively and significantly determined by social networking of the MSEs at less than 5, 1and 10 per cent significant level in both MSEs together,micro andsmall enterprisescategory respectively.The result indicted that a change in the dummy

variable representing social networking of promoters' relationship to customers or other economic agents from 0 to 1 would increaseemployment growth by 0.008, 0.014 and 0.010for both MSEs together, micro and small enterprises category respectively while keeping all others variables remains constant. Long term networking between small business owners and external actors (other promoters or organizations) always enhances employment growth of MSEs by way of better flow of information, moral support and other resources. Limited capacity to produce standardized and good quality product; difficulties in achieving economies of scale in the purchase of raw material, equipment, finance, and consultancy services; and limited opportunity for technology, training, etc drive the need to network among MSEs. The discussants in focus group discussion, unanimously agreed that networking was success factor was the key ways to strengthen enterprises as it can provide access to information, new customers and suppliers. They further added that social cohesion and mutual support helped firms to survive. The study was consistent with those of Eshetu and Zeleke, (2008); Pankhurst, (2003).

Infrastructure (INFRA): Contrary to expectation employment growth negatively and significantly affected by physical infrastructure at less than10 per cent significant level in small enterprises category. Keeping all other variables heldconstant, a unit change in infrastructural facilities would decrease employment growth by 0.091 for small enterprises category.Itjustified that MSEs suffered from inadequate infrastructure. For instance, poor state of roads, unreliable supply of water and electricity to businesses, shortage of essential raw materials, shortage of business premises, etc. were the persistent problems for local businesses and enterprises performance. Poor infrastructure make local goods and services more expensive than corresponding goods and services provided by foreign or domestic competitors outside of problem stricken area. Poor infrastructure was the key factor responsible for the poor quality of goods and services in Ethiopia, as the problem rendered local products less competitive crippling the MSEs potential for growth. Similar results had been found by Solomon, (2004); Bekele and Zeleke, (2008).

Supporting market (SMKT): Contrary to expectation **e**mployment growth negatively and significantly affected by supporting organizations at less than 5 per cent significant level in both MSEs together and micro enterprises category, respectively. A unit increase in support to the MSEs led to decrease employment growth in both MSE together and micro enterprises category by 0.060 and 0.066 respectivelyceteris paribus. The services provided through supporting markets-such as finance; consulting, legal, and tax advice; market information and skills training etc. (Belay, 2012). However, in the study area relationship with supporting organization including trade association, universities and vocational schools, financial institutions, local and national level government agencies, and private business service providers were weak in the form of vertical or horizontal form but skills training less likely provided for the MSEs to offer new products or amount of finance provided for them less likely to allow them to produce greater volumes. FGD deliberations in the study brought out adequate anecdotal evidences that supporting market constraint was the greatest obstacles MSE for growth. Similar results have been found by other researchers (Solomon, 2004; Eshetu and Zeleke, 2008; Belay, 2012).

Conclusion and Recommendation

This study aimed at investigating the key determinants of employment growthamong MSEs, based on interview schedule consisting 352 randomly selected enterprises in three administrative towns in Wolaita Zone, Ethiopia. The interview schedule covers wide variety of activities engaged in trade, construction and manufacturing sectors with 18 or fewer workers, of which 18 per cent with 1-2 worker establishments, 78 per cent with 3-5 workers and 4 per cent with only 6 and above workers. The study also showed that the average annual employment growth rates of the enterprises in the sample since start-up was 11.5 per cent per year. The younger establishments with 5 and less years old grew by about 11.78 per cent annual average, which is more than the 6 and more age group. This shows that the smaller and younger enterprises grow faster than their counterpart. Most of the enterprises are stagnant i.e. about 25 per cent did not change their size category. However, about 46 per cent of enterprises that start with 1-2 grew to the next size class 3-4 workers and 6 per cent to the higher size class (6 and above) workers. The study formally tested the determinants of employment growth econometrically in an extended fashion that include a wide variety of factors. Both initial size and age were negatively determined employment growth. This gives evidence that smaller and younger MSEs grow faster than old ones, and consistent with the learning hypothesis but contrary to the Gibrat's law. Enterprises which are access to finance and education were positivelyand significantly affected employment growth whereas supporting market and physical infrastructure affectedemployment growth negatively and significantly. Vertical linkage with buyers and suppliers through contractual agreement are directly related to improvements in capacity of MSEs and they were statistically significant level where associal networks can help promoters identify business opportunities as well as overcome a number of obstacles related to transaction costs, contract enforcement, and regulation and it was related positive and significant. Based on the findings, the following are recommendationsto improve the future micro and small enterprises growth.

Mobilizing startup capital being a crucial constraint for MSE operators, relaxation of entry norm for licensing of MSEs need to be considered on a priority basis. Average start up fund that could be mobilized for starting a typical entity was found to be birr 25,000 and the study revealed that even such a low amount was perceived to be huge for average entrepreneurs. Escalating cost and inflation, further diminishes the purchasing power of the paltry sum the entrepreneurs manage to mobilize. For the foregoing reasons, the MSE Development Strategy (2011) of the Government should be revisited and the entry capital / investment eligible for licensing to be raised.

Shortage of working premises, power supply, other infrastructures and inputs rising costsare among the problems of challenging the proper functioning of the MSEs. Available working premises and other infrastructure in most cases are inconvenient to accommodate business tasks and related requirements. Though some working premises located in business areas, some are located within residential area. The rents are quite expensive, sometimes leading to bankruptcy and eventual closure. Poor infrastructure makes local goods and

service more expensive, poorer quality than corresponding goods and service provided by foreign competitors, making the local MSEs less competitive and stunted. Relevant government agencies may need to design appropriate policy and regulatory framework to address such and related problems.

Things are already becoming tough for most of the MSEs as costs of running the business are getting unaffordable. In this upsetting context, MSEs need to build up effective inter-firm and Buyers/Sellers relations in all possible area. For instance, MSEs may need to exercise such practices as joint purchase of inputs and joint use of transport in order to cope up with the restraining impacts of costs. MSE are small in size; consequently, they could not compete with large enterprises both locally and nationally. MSEs can deal with this kind of problem through inter-firm and Buyers/Sellers relations and cooperation. Through sound inter-firm and Buyers/Sellers relations, MSEs can build collective efficiency that can help them become andstay competitive with larger enterprises and imported goods. Lastly, the prime role of the government and its agencies at all levels should promote and implement programmes that facilitate local and cross-border business activities, helpful linkages, strategic partnerships, skills-related networking in market information and others, and the outsourcing of activities among MSEs and large enterprises. It is at this stage, both sectors that private and the public become effective partners and ultimately discharge their part towards growth. In addition, it is imperative that the government should provide support with respect to timely and adequate supply of quality inputs, affordable credit facilities and infrastructural development. Maximum effort should be exerted to improve and strengthen the education and training system and the information flow in all business aspect.

REFERENCES

AdmassieAssefa, and Matambalya, F. 2002. Technical Efficiency of Small and Medium Enterprises: Evidence from a Survey of Enterprises in Tanzania, MUSE Project.

Beck, T., and Demirguc-Kunt, A. 2005. Small and Medium-Size Enterprises: Access to Finance as a Growth Constraint, *Journal of Banking & Finance,* vol. 30(11), 2931-2943.

Belay, Goma, 2012. Determinants of Microenterprise Success in the Urban Informal Sector of Addis Ababa: Multidimensional Analysis. Thesisto obtain the degree of Doctor from the Erasmus University Rotterd. Netherlands.

BerhanuDebela, 2014: The role of micro and small enterprises (MSE) in local economic development (LED), with a focus on the wood-work MSE value chains.Submitted in accordance with the requirements for the degree of Doctor of Philosophy in the subject Development Studies at the University of South Africa.

Bigsten, A. and GebreeyesusMulu, 2007. The small, the young and the productive: Determinants of manufacturing firm growth in Ethiopia, Economic Development and Cultural Change 55(4):813-838.

Cabral, L., and J. Mata, 2003. On the Evolution of the Firm Size Distribution: Facts and Theory'. *American Economic Review*, 93 (4).

Casser, G. 2007. 'Money, money, money: A longitudinal investigation of entrepreneur career reasons, growth preferences and achieved growth', *Entrepreneurship and Regional Development*, 19:89–107.

Delmar, F. and S. Shane, 2006. Does experience matter? The effect of founding team experience on the survival and sales of newly founded ventures strategic organization, 4(3): 215-247.

EshetuBekele and ZelekeWorku, 2008. Factors that affect the long-term survival of micro, small, and medium enterprises in Ethiopia. *South African Journal of Economics*, 10(2):76-81.

Evans, David. S. 1987. The relationship between firm growth, size and age: Estimates for 100 Manufacturing Industries. *Journal of Industrial Economics*, Vol. 35, No. 4, pp.567-581.

Federal Micro and Small Enterprises Agency.2015. Development Sector. Annual Statistical Bullten..FeMSEA: Addis Ababa Ethiopia.

Fikirte, W. and Enderias G. 2013. Determinants of Growth and Diversification of Micro and Small Enterprises: the case of Dire Dawa Town, Ethiopia.Master thesis

Fred N. U., 2003. Survey of small and medium scale industries and their potentials in Nigeria.Central bank of Nigeria.

GebreeyesusMulu, 2007.Growth of Micro-Enterprises: Empirical evidence from Ethiopia. Ethiopian Development Research Institute (EDRI), First Draft –February, 2007.

GebreeyesusMulu, 2009. Innovation and Growth of Micro-Enterprises: Empirical evidence from Ethiopia. Ethiopian Development Research Institute (EDRI), First Draft – February, 2009.

Gibrat, R. 193. LessInequalities'Économiques. Paris.

Habtamu, Gebremichael, Aregawi. and Abera., Nigus 2013. Growth Determinants of Micro and Small Enterprises: Evidence from Northern Ethiopia. *Journal of Economics and Sustainable, Development*, Vol.4, No.9

Hagos, Hailay Aregawi., Aregawi Gebremichael, Assmamaw Getie 2014 Determinants of Micro and Small Enterprises Growth in Rural Area: *Journal of Economics and Sustainable Development,* Vol.5, No.19

Jovanovic, B. 1982.Selection and the evolution of industry, *Econometrica,* 50(3):649-67

Liedholm and Mead, D. C. 2008. The dynamics of micro and small enterprises in developing countries.*Journal of Finance*, 26 (1): 61 -74.

MinilekKefale and K. P. M Chinnan, 2012. Employment growth and challenges in Small and Microenterprises in Woldiya, Amhararegion. *Educational Research and Essays*, 1(2):21- 26

MoFED.Ethiopia's Growth and Transformation Plan (Vol.I). Addis Ababa, Ethiopia, 2014.

Pankhurst, A. 2003. The Iddir in Ethiopia: Historical Development, Social Function, and Potential Role in HIV/AIDS Prevention and Control. Northeast African Studies, 7(2), 35-57.

Robu M. 2013. The dynamic and importance of SMEs in economy.

Solomon W., 2004. Socio economic determinants of growth of small manufacturing enterprises in Addis Ababa. Master Thesis Presented to the School of Graduate Studies of Addis Ababa University.

Werotaw Bezabih, 2010. Entrepreneurship: an engine for sustainable growth, development, Prosperity and good governance. Genius Training and Consultancy Service, Addis Ababa, Ethiopia, 226-237.

Wolaita Zone Finance and Economic Development, Data Collection, organization and Dissemination Work Process, 2015. Annual Abstract. WZOFED: WolaitaSodo.

Wolaita Zone Trade and Industry Development Department 2015. Annual Statistical abstract, WOZTID: WolaitaSodo.

Wooldridge, J. 2002. Econometric analysis of cross-sectional and panel data. Boston, MIT.

World Bank 2007. Urbanlabour markets in Ethiopia: Challenges and prospects, Synthesized Report, Vol.2. (Washington)

Yamane, T., 1967. Statistics, an introductory analysis, 2nd Ed. Harper and Row, New York.

****