

Determinants of Micro and Small Enterprises Growth in Rural Area: Evidence from Feresmay Town

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Abstract

Currently, the Ethiopian government gives a great emphasis on the growth of MSEs particularly by formulating a national MSE development and promotion strategy. Besides, some empirical studies were conducted to identify the factors affecting the MSEs growth in Ethiopia. Almost all of these studies were concentrated in the capital city, Addis Ababa and in some other large urban towns of the country. To fill this gap, this study was conducted in a rural town called Feresmay. The main objective of the study was to investigate the factors affecting the growth of MSEs in Feresmay town. For the sake of achieving this objective, primary sources of data were collected through structured questionnaire from a sample of 153 MSEs which were selected using a stratified random sampling technique. Moreover, face-to-face interview was also conducted with the coordinator of Feresmay town MSE development agency as well as 20 selected MSEs owners/operators in the town. While descriptive narrations through concurrent triangulation strategy were applied to analyze the interview questions, data collected using the questionnaire were analyzed using descriptive statistics and econometric model (OLS). Hence, growth of MSEs measured in terms of employment change was affected by different factors including owners/operators age, education level, prior experience, family size, MSE's age, MSE's distance from raw materials, access to credit, infrastructure and market. Therefore, government, non-government organizations and MSEs development agencies should motivate, help and advise the owners of MSEs on their overall business activities; give training on business issues, arrange forum and exhibitions for experience sharing; and solve the credit, infrastructure, supply and market access problems in collaboration with MFI, banks, Ethiopian Electric Power Corporation, suppliers and other organizations.

Keywords: MSEs, OLS, owner/operator, growth, determinant, Feresmay

1. INTRODUCTION

The MSEs sector has been considered by academicians and policy makers as an engine of economic growth, poverty reduction, and social development due to its effect on employment and income generation, import substitution, springboard to entrepreneurship and industrialization, base for medium and large industries and distribution of their products through linkage and sub-contracting, and income distributions among different sections of the society (Mead & Liedholm, 1998; Liedholm, 2002; Bekele & Worku, 2008). For instance, the sector takes 48% of the labour force in North Africa, 51% in Latin America, 65% in Asia, 72% in Sub-Saharan African Countries (ILO, 2002). Mead and Liedholm (1998) found that micro and small-scale enterprises (MSEs) in five African countries (viz., Botswana, Kenya, Malawi, Swaziland, and Zimbabwe) generate nearly twice the level of employment that was registered by large-scale enterprises and the public sector. According to Goldmark and Nicher (2009), while over 96% of businesses are small enterprises in USA, approximately 97% of firms in Mexico and Thailand are MSEs.

According to the Ethiopian Central Statistical Authority (2004), almost 50% of all new jobs created in Ethiopia are attributable to MSE sector. According to Aregash (2005) cited in Bekele and Worku (2008), 98% of business firms in Ethiopia are MSEs, out of which SEs account for 65% of all businesses. In Ethiopia, MSE sector is the second largest employment generating next to agriculture. Recognizing the significance of this sector as a key factor for rapid economic development, the Government of Ethiopia had issued Micro and Small Enterprises Strategy (FDRE, MoTI, 1997). Besides, the Growth and Transformation Plan (GTP) of Ethiopia has envisaged the promotion of micro and small enterprises as an important tool of poverty reduction (FDRE, MoFED, 2010).

Despite the large potential contribution of MSEs, the sector in most developing countries face constraints both at their start up and after operation phase (World Bank, 2004). Three-fourth of the MSEs in rural Tanzania is non-growing due to the problem of access to finance, road infrastructure and communication (Kinda & Loening, 2008). In addition, majority of MSEs in Eldoret, Kenya has experienced minimal or no growth due to the inadequacy of availability of finances, poor business management skills, poor marketing and

entrepreneurial attribute of the owner managers (Mbugua et al., 2013).

In Ethiopia, MSEs were found small comparing to other African countries due to lack of access to markets, finance, working premises, supply of raw material, lack of sufficient capital, business information, business premises, the acquisition of skills and managerial expertise, access to modern technology, and legal and regulatory environments (MoTI, 1997). Similarly, Mulu (2007) finds that the average annual growth of the surveyed six major towns in Ethiopia was 9 percent since start-up and 69 percent of these MSEs did not growth due to the problems of inadequate formal source of credit and informal network. In addition, some studies (Admasu, 2012) reported that most MSEs have no growth and remain at their initial level due to different internal (owner's/operator's related and/or firm's related) and external factors.

However, these studies were conducted on either the capital city of the country or the major cities and towns of Ethiopia. Their focuses were in large cities and towns of the respective country but not the small towns (rural town). Therefore, to fill the specified gap, this study was intended to investigate the factors affecting the growth of MSEs in rural area, Feressmay town. In line with this gap an attempt was made to answer the following basic research questions:

1. What is the growth situation of MSEs in Feressmay town?
2. What are the key factors that affect growth of MSEs in the study area?

2. LITERATURE REVIEW

2.1. Theoretical Review

Currently there are two dominant theories on determinants of growth of MSEs: the Industrial organisation model and resources based view. The industrial organization model sees growth of firms from an external perspective, that is, environmental/external factors, instead of resources and capabilities that are internal to the firm, dominant role on a company's growth and strategic actions of a firm (Hitt *et al.*, 2009). According to this model a business enterprise must first consider the external environment (the industry in which it operates) and search the one that is most attractive to the firm and design a strategy that fits to (is required by) the characteristics of the industry. Then it must be able to successfully implement that strategy to increase its level of competitiveness so that it generates above average return.

On the other hand, the resource based view considers unique resources and capabilities owned and controlled by each firm to be the sources of ability to generate above average return or higher growth than competitors. The argument of resource based view is that all firms face the same external environment. However, firms with strong internal capacity (tangible and intangible resources) not only exploit environmental opportunities but also can succeed to challenge any external threats and challenges. This implies that while firms with unique resources and capabilities earn superior profits, firms with marginal resources can only expect to breakeven (Barney, 1991; Petraf, 1993).

2.2. Empirical Review

Many empirical studies have been conducted to investigate the determinant factors affecting MSEs growth. Generally, these factors relate to entrepreneurial, firm, inter-firm characteristics and external factors. Entrepreneurial characteristics such as owner/operator gender, age, education level, previous work experience, management skill, economic background and marital status determine the growth of MSEs (Chirwa, 2008; Enock, 2010; Habtamu, 2012; Janda et al., 2013; Mbugua et al., 2013; Mulu, 2007; Osinde, 2013). Other studies (Clover & Darroch, 2005; Enock, 2010; Mulu, 2007; Tiruneh, 2011) found that firms related factors including age, size, initial capital, location, formality, type of business to be the most determinant factors affecting the growth of MSEs.

Moreover, some studies (Atieno, 2009; Habtamu, 2012) revealed growth of MSEs affected by inter-firm related factors like linkage, network, and competition. The growth determinants of MSEs was also associated with external factors such as access to credit, infrastructure, market, working place, technology, social services and other legal and regulatory frameworks (Admasu, 2012; Ahiawodzi & Adabe, 2012; Gichana & Barasa, 2013; Hove & Tarisai, 2013; Ishengoma & Kappel, 2008; Kefale & Chinnan, 2012; Kinda & Loening, 2008; Mbugua et al., 2013; Mulu, 2007; Syed & Mohammad, 2008).

Many empirical studies (Habtamu, 2012; Haftom, 2013; Ishengoma & Kappel, 2008; Kokobe, 2011; Mulu, 2007) found that Male-headed firms grow faster than that of female-headed, but Chirwa (2008) indicated that female-owned enterprises tend to grow more rapidly in terms of employment than male-owned ones. Younger owner/manager of MSEs is more likely to grow than the older counterparts (Chirwa, 2009; Janda et al., 2013; Kokobe, 2013). Growth of MSEs improves with increasing in education (Ahiawodzi & Adabe, 2012; Mulu, 2007). On the other hand, limited studies revealed the effect of increasing educational level of the owner/operator on the growth of MSEs is to some level (Habtamu, 2012; Haftom, 2013; Schiebold, 2011). Some studies (Kokobe, 2013; Mulu, 2007) reported that a firm with more years of work experience typically have faster-growing than their counterparty.

With regard to the sector-growth relationship firms engaged in manufacturing and service sector grows

faster than their counterparts (Mulu, 2007; Habtamu, 2012; Haftom, 2013; Kokobe, 2013). There were other empirical studies (Audretsch, 1995; Haftom, 2013; Janda et al., 2013; Mulu, 2007) which supported the idea that young MSEs and smaller are more likely to grow faster compared with larger MSEs and that have been existed longer period. On the other hand, Mateev and Anastasov (2010) revealed that there is positive relation between firm age and its growth by assuming firms may benefit from learning which enables them to develop expertise in production, management, and marketing. Start-up capital of a given firm has significant positive effect on the growth of MSEs (Ahiawodzi & Adabe, 2012, Habtamu, 2012; Haftom, 2013).

3. RESEARCH METHODOLOGY

To investigate the factors affecting the growth of MSEs in the area, a primary source of data which includes both qualitative and quantitative were collected through questionnaires and interviews on a cross sectional basis. To this effect, 160 MSEs were selected from each sector using stratified random sampling technique. In collecting of the required data the study was incorporated both qualitative and quantitative approaches (mixed approach).

Annual average employment growth ($MSEsgr = \frac{\ln St' - \ln St}{MSEsage}$) was used to measure the dependent variable

(MSEs growth). Where, MSEsgr = MSEs growth, $\ln St'$ = ln of current employment, $\ln St$ = ln of initial employment. The study includes five owners/operators related factors (gender, age, education level, previous experience and family size), five firm's related factors (type of sector, age, initial capital, distance from raw material and initial size) and four external factors (access to credit, infrastructure, working place and market) as explanatory variable.

Once the raw data were processed through checking, editing and coding, they were analyzed using both descriptive and inferential tools. In descriptive analysis each explanatory variable were analyzed in relation to the dependent variable (MSEs growth) using table, graph and percentage. Again t-test and ANOVA table were applied to check whether the variables have significant effect on MSEs growth. To determine the major factors affecting MSEs growth and to test the proposed hypothesis, econometric model (OLS) were also utilized. The derived equation of the model in this study which is the function of dependent variable to various explanatory variables is given as:

$$MSEsg = \beta_0 + \beta_1S - \beta_2Oa + \beta_3Edu + \beta_4Exp + \beta_5Fs + \beta_6Sec - \beta_7Fa + \beta_8Cap - \beta_9D + \beta_{10}Iniemp + \beta_{11}Fin + \beta_{12}Infr + \beta_{13}Wo + \beta_{14}Mkt + \xi_i$$

4. RESULT AND DISCUSSION

160 questionnaires were distributed to and returned from respondents. However, at the time of checking the returned questionnaire for completeness, 7 (4.4 percent) questionnaires were found incomplete. This represents a response rate of 95.6 percent. Therefore, data were analyzed based on the data collected using questionnaires from the remaining 153 (95.6%) respondents as well as data collected through interview questions.

4.1. Descriptive Result and Discussion

4.1.1. The Growth Situation of MSEs in the Study Area

The growth status of the surveyed MSEs was described based on growth in number of employees during their business period and average annual employment growth.

Table 1 Growth situation of micro and small enterprises in Feresmay town

Sector	Observation		Growth status					
	Number	Percent	No. of employees		Mean	SD	Min.	Max.
			Initially	currently				
Micro	122	80	235	338	0.02	0.07	0	0.55
Small	31	20	108	195	0.19	0.15	0	0.55
Total	153	100	345	535	0.053	0.12	0	0.55

Source: Own survey (2014)

Note: No. = number, SD = standard deviation Min. = minimum, and Max. = maximum.

Table 1 shows that majority 122 (80 percent) of the surveyed enterprises in Feresmay town were micro enterprises and the remaining 31(20 percent) were small enterprises. The total employment absorbed by both enterprises (i.e., micro and small) in the sample establishments rose from 343 when start to 533 current. When we look at the growth situation of each enterprise separately, table 1 indicates that the surveyed micro enterprises generally rose from 235 employees at start to 338 employees at the time of survey, whereas small enterprises absorbed 108 employees at start and grows to 195 employees currently. With regard to the average annual growth rate the surveyed MSEs grown by 5.3 percent at a standard deviation of 0.12. Specifically, micro enterprises grow by 2 percent, while small enterprises grow by 19 percent at a standard deviation of 0.07 and 0.15 respectively. This result is the least when compared to other previous studies in Ethiopia such as Mulu (2007) who founds 9 percent growth rate and Kefale and Chinnan (2012) found 6.5 percent. It was also small

when compared to MSEs employment growth with some African countries such as Botswana, Malawi, Swaziland and Zimbabwe where their annual average employment growth ranges from 6.5 percent to 10.5 percent (Mulu, 2007).

2.1. MSEs Growth and Owners Related Factors

As it is shown in table 2 gender of the owner/operator was the first factor which expected to affect the growth of MSEs. Out of the total 153 surveyed MSEs, 98 (64 percent) were male headed. The mean growth rate of male and female were 5.7 and 5.3 percent respectively at the same standard deviation of 0.12. Hence, to a very slight extent, male headed MSEs seem grow faster than female headed. This result is consistent to the result of Hove & Tarisai (2013) but contrary to other studies (Mulu, 2007; Habtamu, 2012; Haftom, 2013; Kokobe, 2011; Ishengoma & Kappel, 2008) and Chirwa (2008). The possible explanations for this case may be the motivations and supports that the current Ethiopian government provides to females in order to initiate them to participate and actively work in the area similar to males.

Table 2 shows that about 49 percent of the sampled MSEs were found within the age range of 22-51. The table further indicates that the first two age categories (22-30 and 31-41 years age) grew at 25 percent and 2.6 percent while growth rate of those MSEs operated by aged individuals (with age of greater than 42 years) remain constant at the same standard deviation. From this we can understand that age of the owner/operator has an exact inverse relation with the growth of MSEs.

Table 2 MSEs growth and owners/operators related factors

Variable	Category	Observation		Growth rate				T-test/ANOVA	
		No.	Percent	Mean	SD	Min	Max	t/F-value	Sig. level
Gender	Male	98	64	0.057	0.12	0	0.55	0.65	0.553
	Female	55	36	0.053	0.12	0	0.55		
	Total	153	100	0.053	0.12	0	0.55		
Owner/operator age	22-31	30	20	0.25	0.14	0.1	0.55	88.5	0.000
	32-41	23	15	0.026	0.05	0	0.14		
	42-51	74	48.5	0	0	0	0		
	52-61	17	11	0	0	0	0		
	>=62	1	0.5	0	0	0	0		
	Total	153	100	0.053	0.12	0	0.55		
Owner's education	Illiterate	5	4	0	0	0	0	103	0.000
	1-4	59	38	0.003	0.02	0	0.11		
	5-8	60	39	0.014	0.04	0	0.18		
	9-12	20	13	0.18	0.11	0	0.37		
	TVETI	9	6	0.37	0.15	0.18	0.55		
	Total	153	100	0.053	0.12	0	0.55		
Owner's Prior Experience	zero	67	44	0.057	0.12	0	0.55	0.754	0.557
	1-5	38	25	0.034	0.1	0	0.55		
	6-10	29	19	0.065	0.12	0	0.55		
	11-15	17	11	0.062	0.12	0	0.37		
	>=16	2	1	0	0	0	0		
	Total	153	100	0.053	0.12	0	0.55		
Family size	1-2	43	28	0.057	0.13	0	0.55	7.823	0.024
	3-4	49	32	0.04	0.13	0	0.55		
	5-6	49	32	0.025	0.13	0	0.55		
	7-8	11	8	0.01	0.03	0	0.11		
	Total	153	100	0.053	0.12	0	0.55		

Source: own survey (2014)

Note: No. = number, Min = minimum, Max = maximum, Sig. level = significance level and SD = standard deviation.

As it is depicted in table 2 educational level of the owner/operator is the third independent variable of this study. Most of the sampled MSEs were operated by individuals who completed their primary education (Grade1- Grade 8) and it was found that the growth of MSEs increase with an increasing education level. The table also shows that most (44 percent) of the surveyed MSEs had no work experience before starting this business. With regard to the effect of owner/operator prior work experience difference on MSEs growth, table 2 indicates that there is no any series pattern among each category. Family size was the last owner's related factor which has a negative

relation with the growth of MSEs. As it is indicated in table 2 the mean scores of MSEs that owned by those who have family size of 1-2, 3-4, 5-6 and 7-8 were 5.6, 4, 2.5, and 1 percent respectively. This shows that the average growth of MSEs decrease as the family size of the owner/operator increases.

In addition, t-test for gender variable and ANOVA table for the other variables were calculated whether or not the mean differences between and among the categories of the variables is statistically significant. In doing so, age, education level and family size of the owner were found statistically significant in determining MSEs growth, whereas gender and previous work experience of the owner were found statistically insignificant.

4.1.3. MSEs Growth and Firms Related Factors

In this study five firms' related factors (type of sector, age, initial capital, distance from raw material and initial employment size) were identified to examine their effect on MSEs growth.

The type of sector in which the MSEs engaged in is the first firm's related factor. As shown in table 3 out of the total 153 surveyed MSEs, majority of the enterprises were engaged in manufacturing and trade constitute 50(32.5percent) and 45(29 percent) respectively. In terms of the effect of business types, table 3 revealed that the growth level of MSEs engaged in manufacturing, urban agriculture, service, construction and trade were 10, 4.1, 3.3, 13.7 and 1 percent respectively. This shows that construction and manufacturing were the two upmost sectors in which MSEs grow faster than the other.

Table 3 MSEs growth and firms related factors

Variable	Category	Observation		Growth rate				ANOVA table	
		No.	Percent	Mean	SD	Min	Max	f-value	Sig. level
Type of sector	Man.	50	32.5	0.1	0.14	0	0.55	5.396	0.000
	Urban A.	33	21	0.041	0.1	0	0.37		
	Service	21	14	0.033	0.1	0	0.37		
	Con.	4	3	0.137	0.27	0	0.55		
	Trade	45	29	0.01	0.37	0	0.23		
	Total	153	100	0.053	0.12	0	0.55		
MSE's age	<=6	51	33	0.095	0.17	0	0.55	81.328	0.000
	7-10	75	49	0.033	0.07	0	0.28		
	11-14	21	14	0.03	0.05	0	0.11		
	15-18	4	3	0.02	0.05	0	0.1		
	>=19	2	1	0	0	0	0		
	Total	153	100	0.053	0.12	0	0.55		
Initial capital	<=1000	20	13	0.023	0.02	0	0.37	0.655	0.914
	1001-5000	61	40	0.042	0.1	0	0.55		
	5001-10000	41	27	0.054	0.11	0	0.37		
	10001-30000	29	19	0.100	0.2	0	0.55		
	>=30000	2	1	0	0	0	0		
	Total	153	100	0.053	0.12	0	0.55		
Distance from raw material	zero	60	39	0.136	0.04	0	0.55	76.2	0.0472
	1-100	56	37	0.07	0.12	0	0.55		
	101-300	33	21.5	0.03	0.12	0	0.37		
	301-500	3	2	0	0	0	0		
	>=501	1	1	0	0	0	0		
	Total	153	100	0.053	0.12	0	0.55		
Initial size (Empl)	1	44	29	0.033	0.14	0	0.55	1.32	0.764
	2	46	30	0.022	0.06	0	0.28		
	3	50	33	0.04	0.12	0	0.37		
	4	8	5	0.07	0.21	0	0.55		
	5	5	3	0	0	0	0		
	Total	153	100	0.053	0.12	0	0.55		

Source: Own survey (2014)

Note: Manu = manufacturing, Urban A. = urban agriculture, Con. = construction, No. = number, Min = minimum, Max = maximum, Sig. level = significance level and SD = standard deviation.

With regard to MSEs age table 3 indicated that majority 75(49 percent) of the surveyed MSEs have existed in business for 7-10 years. In relation to its growth effect, MSEs that have been in operation less than or equal to 6 years registered the highest growth rate (9.5 percent) which declines with the increase in age of the enterprise. MSEs that stay for more than 19 years scored the least growing level which is non-growing. This shows that the

number of years over which the MSEs exist in operation has a significant effect on their growth.

As shown in table 3, 40 percent of the surveyed MSEs started their business with the amount of Capital, Birr⁷ 1001-5000. With regard to the relationship between initial capital and growth, the table shows that growth rate increases with increase in amount of initial capital up to certain level. For example, MSEs with initial capital of birr 1001-5000 grew at 4.2 percent, followed by 5.4 percent for those with initial capital of birr 5001-10,000, the highest growth rate (10 percent) was registered by MSEs that started with relatively highest amount (Birr 10,000-30,000.00). However, those with initial capital of greater than 30,000 birr did not show any change in their employment. This indicates that the relationship between initial capital growth has no any known pattern which is contrary to previous studies that reported positive significant effect of initial capital on growth (Clover and Darroch, 2005; Ahiawodzi and Adabe, 2012; Habtamu, 2013).

Distance from raw material was the other variable in relation to firm's related factor. Table 3 depicted that most 60(39 percent) of the surveyed MSEs were travel zero kilometer to obtain raw material. Based the table all of the surveyed MSEs that travel more than 300 kilometers to get raw materials were non-growing. While the remaining MSEs that travel zero, 1-100 and 101-300 kilometers were grown by 13.6, 7 and 3 percent respectively. This reveals that MSEs that did not travel any distance to get/buy raw materials were grow faster than the other. This followed by MSEs that travel less than 100 kilometers.

The initial size of MSEs, measured in terms of initial number of employment, was the last firm's related factor. As it is shown in table 3 most 50(33 percent) of MSEs were started their business with three employees. With respect to its effect on MSEs growth, similar to the effect of initial capital on growth, initial size measured in number of employees has positive relationship up to 4 employees after which growth rate either declines or remain constant. This shows that there is no clear linkage between the initial size of the enterprise and its growth which is similar with the results of Gibrat's (1931) law and empirical result of Osotimehin et al. (2012) but contrary to Jovanovic's (1982) theory and other empirical findings of (Mulu, 2007; Janda et al., 2013).

Based on the calculated ANOVA table the type of sector in which the MSEs engaged in, MSEs age and MSEs distance from raw material were statistically significant in determining MSEs growth. On the other hand, MSEs initial capital and initial employment size were statistically insignificant in determining MSEs growth (see table 3).

4.1.4. MSEs Growth and External Factors

External factor was the other group of factor that can affect the growth of MSEs. In this study four external factors were identified to explain their effect on the growth of the surveyed MSEs. These include access to credit, infrastructure, working premises, and market. To examine the effect of these factors, respondents were asked to give their opinion based on five point likert scale questions (i.e. 5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree, and 1 = strongly disagree) on each sub-specified variables. Hence, if the average result of one variable is less than 2.5, it is not significant in determining the growth of MSEs, whereas if the result is greater than or equal 2.5, the specified variable is significant factor in determining the MSEs growth.

Table 4 indicated that loan application procedure of banks and other lending institutions was the foremost credit related factor affecting the growth of MSEs which follows with high interest rate charged by banks and other lending institutions and high collateral requirement from banks and other lending institutions. With respect to infrastructure access, insufficient and inconvenient of road was the main problem which accounts a response rate of 4.1 followed by the problems of insufficient and interruption of power, insufficient and interruption of water supply, lack of sufficient and quick transportation and insufficient and interruption of communication services. In relation to working place, inadequacy of working premises was the foremost factor affecting the growth of MSEs. Again difficulty to obtain working premises, existing working premises is inconvenient and the rent paid for existing working premises is high were the other significant factors that affect MSEs growth. Finally, with the exception of poor customer relationship and handling, the remaining few marketing days, inadequate market, shortage of supply of raw materials and high competition were significant factors affecting MSEs growth.

Generally, credit and working place factors were the two topmost factors that affect the growth of MSE in the selected area. This followed by infrastructural and marketing factors.

⁷ Birr is official currency of Ethiopia which is being exchanged at Birr 19 for one USA dollar.

Table 4 MSEs growth and external related factors

Variables	Mean Growth	SD	Minimum	Maximum
Access to formal credit				
Inadequacy of credit institutions	3.75	0.94	1	5
High interest rate	4.32	0.74	1	5
High collateral requirement	4.3	0.64	2	5
Complicated loan application procedures	4.5	0.71	2	5
Grand	4.22	0.76	1.5	5
Infrastructural factors				
Insufficient and interruption of power	4	1.06	1	5
Insufficient and interruption of water supply	4	0.83	1	5
Insufficient and interruption of communication	3.85	0.91	1	5
Lack of sufficient and quick transportation	3.88	0.96	1	5
Insufficient and inconvenient road	4.1	0.87	1	5
Grand	3.96	0.93	0.8	5
Working premises factors				
Difficulty to obtain working premises	4	0.98	1	5
Existing working premises is not enough	4.24	0.85	1	5
Existing working premises is inconvenient	4.16	0.93	1	5
The rent paid for existing working premises is high	3.84	1.25	1	5
Grand	4.1	1	1	5
Market access factors				
Inadequate market for product/service	4.32	0.91	1	5
Shortage of supply of raw materials	3.78	1.1	1	5
Few marketing days	4.7	0.62	1	5
Poor customer relationships and handling	2.3	1.3	1	5
High competition	3.81	0.93	1	5
Grand	3.78	0.97	1	5

Source: survey data (2014)

4.2. ECONOMETRIC RESULTS AND DISCUSSION

Beyond the descriptive statistics, econometric model (OLS) was also used to identify the major factors affecting the growth of MSEs in the area. Growth in employment was applied as a measurement to MSEs growth which is calculated by applying the Evans (1987) formula ($\text{Firmgr} = (\ln St' - \ln St) / \text{firma}$). After having the calculated value of growth in employee, the explanatory variable was regressed to see whether they are significant determinants of MSEs growth. For categorical variables such as gender, sector, credit, infrastructure, work premises and market access dummy variable have created. Again for external variables (credit, infrastructure, and market access), an average of its specific variables was calculated. Then it is categorized in to agree if the result is ≥ 2.5 , otherwise disagree. Accordingly, owners/operators age, education, previous work experience, and family size; MSE's age, and distance from raw materials; and credit, infrastructure and market access were found significant factors. While, gender of the owner, size, types of sector, initial capital, and working premises access were found insignificant factors in determining MSEs growth.

With regard to the owner/operator related factors, all variables, except gender of the owner/operator were found as significant factors in determining the growth of MSEs. Age of the owner/operator affects the growth of the surveyed MSEs significantly but negatively at 5 percent level of significance. This implies that for every unit increase in age, a 0.0178 percent decrease in growth was predicted, holding other variables constant. Unlike to the findings of (Mulu, 2007; Habtamu, 2012 and Haftom, 2013) that found age of the owner/operator is not significant factor affecting MSEs growth, this result is consistent with the result of (Janda et al., 2013; and Kokobe, 2013) that the younger owner/manager of MSEs is more likely to grow than the counterparty. Previous studies suggested the reason that the younger owner/operator has the necessary motivation, energy and commitment to work and is more inclined to take risks; a younger individual may have a higher need for additional income. In addition, the burden of supporting a family and meeting mortgage payments generally declines with age. That means the older owner/operator is likely to have reached his/her initial aspiration.

Other variables being constant, the education level of owner/operator was positively significant factor

affecting the growth of MSEs at 1 percent level of significance. Specifically, based on the result in table 5, its coefficient is 0.010401. This means that for every 1 grade increase in education level, a 1 percent increase in MSEs annual growth rate. This finding is consistent with other empirical studies (Ahiawodzi & Adabe, 2012; Mbugua et al, 2013; Mulu, 2007) that found owners/operators of MSEs with a higher formal education and training would be expected to grow faster than their counterparty. The possible explanations given by previous studies with regard to this are: education improves the ability of efficiently allocating resources to more productive lines of business and to select profit maximizing inputs/materials. In addition, as the education level of owner increases, their probability of teaching entrepreneur and other business related courses is also increases particularly at higher level so that it helps them to develop skills related to trading, marketing and management of their products/services.

Previous work experience of the owner/operator is the other variable that significantly and positively affects the MSEs growth, *ceteris paribus*. The coefficient of this variable is given as 0.0021631. This indicated that a one year increase in previous work experience leads to growth of MSEs by 0.25 percent. This result is consistent with some empirical studies (Kokobe, 2013; Mbugua et al., 2013 and Mulu, 2007) that found the owner with a more work experience is more likely to grow than their counterparty. This may be due to the explanation that as owners work more in other similar activities, they can enrich themselves with different skills such as skills on management, marketing, customer relation, financial keeping, saving etc so that it may help them in improving the business activities of the current enterprises. Moreover, previous work experience may help the owner in adopting and being ready to any sudden challenges and failures because of their prior experience that they have been faced or observed from anyone else in the area than any beginners.

Family size of the owner was the last owners related variable of this study in which its effect on MSEs growth is significant but negative at 1 percent level of significance other variables held constant. Based on the result on table 5, as one family member adds to the household of the owner, the MSEs growth decrease by 1 percent.

In other words, table 5 revealed that only two firm's related variables (MSE's age and the distance MSEs travel to get raw material) were negatively significant at 10 and 1 percent respectively assuming other variables held constant. The coefficient of MSE's age is given as -0.0018824. This means that a one year increase in the age of MSEs, their growth decrease by 0.2 percent. Many previous theories and empirical studies have been given different possible explanations for this case. When MSEs age increase, they may benefit from learning which enables them to develop expertise in production, management, and marketing (Mateev & Anastasov, 2010). Older MSEs frequently fail to invest sufficiently in existing or emerging technology, leaving them with relatively outmoded equipment and hindering productivity levels relative to younger firms (Ahiawodzi & Adabe, 2012; Jovanovic, 1982; and Mulu, 2007).

On the other hand, the coefficient of distance from raw material is negative at 0.00001. This shows that as the owner/operator travels one more kilometer to get raw material, the growth of MSEs decrease by 0.0001 percent. This may be due to the reason that as MSEs travel more and more distance to get raw material, they are forced to incur higher transportation costs so that their profitability level decreases which in turn reduce its capacity to hire or include more employees.

As per table 5 from the external related factors, credit, infrastructure and market access were found significant factor determining MSEs growth at 5, 10 and 1 percent respectively. Assuming all other variables remain constant, the probability of growth of MSEs that agree with no access of credit from formal financial institutions are decreased by 1 percent at 10 percent significance level compared to MSEs that disagree with the statement of "there is no credit access from formal financial institutions. Therefore

Unlike to the findings of (Gichana & Barasa, 2013; Haftom, 2013) who found that credit available to MSEs does not necessarily lead to their growth, many studies (Gilbert, Dougall & Audretsch, 2006; Osotimehin et al., 2012; Ahiawodzi & Adabe, 2012; Mbugua et al., 2013; Mulu, 2007; Kinda & Loening, 2008; Admasu, 2012; Hove & Tarisai, 2013; Kefale & Chinnan, 2012) assured that access to finance have a great impact on the growth of MSEs. The possible explanation of this result is credit helps MSEs to invest in more profitable scenarios through allocating large capital.

Furthermore, access to infrastructure was also found positively significant at 10 percent level of significance. The coefficient result of those who agree with the infrastructural problem is given as -0.0078161. This implies that other things being remain constant, the growth level of MSEs that agreed with the infrastructural problems decrease by 0.78 percent comparing to those who were disagree with the infrastructural problem. This result is consistent with the results of (Admasu, 2012; Clover & Darroch, 2005; Haftom, 2013; Ishengoma & Kappel, 2008; Kinda & Loening, 2008; and Osotimehin et al., 2012) that found nonexistent of basic infrastructure such as, inability to access market, communication, power, water, road etc have a large impact on the growth of MSEs.

Finally, assuming all other factors remain constant, the probability of growth for MSEs that agreed with the statement that "there is a problem of market access" decreases by 1.8 percent at 1 percent significance

level compared to MSEs that disagreed with this statement. This result is consistent with results of (Mbugua et al., 2013; Kinda & Loening, 2008; Admasu, 2012; Hove & Tarisai, 2013; Kefale & Chinnan, 2012; and Kokobe, 2013) which ascertained that access to market affects MSEs growth positively and significantly.

Table 4.19 the result of OLS regression model

Growthm2	coef	Std.Err.	P> (t)
Gender of the owner/operator	-.0074787	.0097409	0.444
Age of the owner/operator	-.0000178	8.11e-06	0.030**
Education level of the owner/operator	.010401	.002418	0.000*
Previous work experience of the owner/operator	.0021631	.0010375	0.039**
Family size of the owner/operator	-.0258292	.0081516	0.002**
Firm's related factors			
MSE age	-.0018824	.0009825	0.057***
Type of sector (reference manufacturing)			
Construction	.0166385	.0154887	0.285
Urban agriculture	-.0009949	.0061128	0.871
Service	.0006462	.0048444	0.894
Trade	-.0015893	.0020342	0.436
Initial capital	-.0030435	.0043946	0.490
Distance from raw material	9.16e-09	2.31e-09	0.000*
Initial employment size	.0084143	.0055127	0.129
External factors			
Infrastructure access (reference disagree)			
Agree	-.0078161	.0057594	0.077***
Credit access (reference disagree)			
Agree	-.0096789	.004374	0.029**
Working premises access (reference disagree)			
Agree	-.0008832	.0047559	0.853
Market access (reference disagree)			
Agree	-.0187278	.0054236	0.001*
_cons	.197401	.0497873	0.000

Number of obs = 153, Prob > F = 0.0000, R-squared = 0.8025, Adj R-squared = 0.7776

Source: OLS result from own survey (2014)

Note: *, ** and *** are indicate 1, 5 and 10 percent level of significance.

5. CONCLUSION AND RECOMMENDATION

Based on the findings the study concluded that Majority of the enterprises in Feresmay town was micro enterprise. In terms of their sector classification, most of the micro enterprises were involved in trading activities, whereas majority of the small enterprises were engaged in manufacturing sector. Numerically, MSEs grow from 343 to 533 employees from their operation to date. However, the annually average growth rate of MSEs in the town was 5.3 percent. Both age and family size of the owner were negatively related with the growth of MSEs. This indicates that the younger owner with smaller family size grow faster than their counterparty. While, education level and prior experience of the owner/operator have a positive and significant effect on MSEs growth. This gives the evidence that MSEs owned/operated by those who have higher education level and previous experience grow faster than their counterparty. Both MSE's age and distance from raw materials have negative and significant effect on their growth. Thus, the younger MSEs in which its business near to the raw materials grow faster than their counterparty. With respect to external factors, MSEs with higher access to credit, infrastructure and market grow faster than their counterparty. Hence, credit, infrastructure and market access were positively and significantly affects the growth of MSEs in the town. On the other hand, the OLS result indicated that gender of the owner/operator, types of sector, initial capital, initial employment size, and access to working premises were found insignificant in determining the growth of MSEs.

Therefore, Policies, strategies and support programs of governmental and non-governmental organizations on MSEs should be multidimensional and even give great focus at micro level and in far area to enhance the micro enterprises as well as MSEs found at far area. Government in general and MSEs development agency in particular should motivate, help and advise the older owners and MSEs; give training on business issues, forwarding the model MSE owners, arrange forum and exhibitions for experience sharing, and create association and cooperation with suppliers. Besides, Government in general and MSEs development agency in particular need to solve the credit, infrastructure, supply and market access problems in collaboration with MFI, banks, Ethiopian Electric Power Corporation, suppliers and other organizations.

6. LIMITATION AND SUGGESTION FOR FUTURE RESEARCH

Because of the limited time and resource, this study was conducted in one rural area, Feresmay town. But this may not represent the situation of MSEs across different areas and it is difficult to generalize at the regional level or country level. Besides, the study was used a sample MSEs selected from the town. Hence, an interesting finding may come up by conducting studies at different areas (towns).

In the study five owners/operators related factors, five firm's related factors and four external factors were included to examine their effect on the growth of MSEs in the area. However, there are other variables that may affect MSEs growth. Thus, researchers are suggested to conduct a study by incorporating other factors such as management skill, access to technology and other inter-firm related factors. In addition, some of the findings regarding some factors were different from previous studies; therefore this indicates further research needs to prove.

Moreover, the study was employed employment size to measure the growth of MSEs. Therefore, an interesting finding may come up by applying other measurement methods such as asset growth and sales growth.

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