

Growth Determinants of Micro and Small Enterprises: Evidence from Northern Ethiopia

Habtamu Tefera[†], Aregawi Gebremichael^λ and Nigus Abera^Υ

[†] Department of Cooperative Studies, ^λ ^Υ Department of Accounting and Finance, College of Business and Economics, Mekelle University P. O. Box: 451, Fax: 00251344407610

E-mail[†]: hthabtef@gmail.com, ^λ: aregawigm@gmail.com, ^Υ: nassizeab@yahoo.com

Abstract

This study aims to investigate the growth determinants of MSEs based on a survey covering 178 randomly selected MSEs from Mekelle city, Tigray regional state of Ethiopia through the test of four main hypotheses that are formulated concerning the role of gender of owner, initial investment on the firm, location and sector in which the firm operates as a main determinants of growth of an enterprise. Semi-structured questionnaire and interview were used to collect data, and the binary choice model which is logistic regression was used to identify factors that significantly affect the growth of MSEs using change in employment size since startup as a measure of firm growth in which about 76.4% of MSEs are found survival and the remaining 23.6% are growing. The binary choice logit model result shows that there is a significant gender difference on the growth of MSEs with male owner growing faster than those owned by female. In addition, the initial investment on the firm, the location and the sector in which the MSEs operates matter a lot for the growth of these enterprises. Hence, government and non government organizations that are concerned with unemployment reduction and poverty alleviation through the promotion and development of MSEs need to take these factors in to account to accomplish better result and increase the potential contribution of MSEs to the economic growth of the country.

Key words: Determinants, Employment, Growth, Micro and Small Enterprises (MSEs), Binary Choice Model, Survival, Tigray, Ethiopia.

1. Introduction

In developing countries, Micro and Small Enterprises (MSEs) by virtue of their size, location, capital investment and their capacity to generate greater employment have proved their paramount effect on rapid economic growth (MTI, 1997). The sector is also known in bringing economic transition by effectively using the skill and the talent of people without requesting high-level training, much capital and sophisticated technology. As a result the MSE sector is described as the natural home of entrepreneurship since it provides an ideal environment that enable entrepreneurs to exercise their talents to fill and attain their goals. Due to these MSEs are recognized as a real engine of economic growth and technological progress (Carrier, 1994; Mulharn, 1995). Moreover, MSEs exert a very strong influence on the economic growth of all countries over the world (Aharoni, 1994; Drillhon & Estime, 1994). This makes MSEs a major area of concern for government and non-government organizations with an objective of unemployment reduction, income generation and equitable income distribution, import substitution, innovation, poverty alleviation etc.

The MSE sector is seen as an essential catalyst for job creation, unemployment reduction and social progress at large since it takes the lion share of fast growing labor force in the world particularly 48% in North Africa, 51% in Latin America, 65% in Asia, and 72% in Sub-Saharan African Countries (ILO, 2002). The study made in five countries of Eastern and Southern Africa (Botswana, Kenya, Malawi, Swizaland & Zimbabwe) by Mead and Liedholm (1998) shows that people engaged in MSEs are nearly twice the level of employment in large scale enterprises and in the public sectors.

In Ethiopia, MSEs are the second largest employment generating sector next to agriculture. A National survey conducted by Central Statistics Agency (CSA) in 2007 indicates that more than 1.3 million people in the country are engaged in MSEs sector. But a large number of MSEs are unable to grow (expand in terms of employment) and remain to be survival (non-growing) type which cannot provide employment. Moreover, out of 1000 MSEs in this country around 69% of them are found survival types (Gebreyesus, 2007) and particularly in capital city Addis Ababa majority (75.6%) of the MSEs are unable to grow at all since start up and only 21.9% of the MSEs were added workers (Wasihun & Paul, 2010). Even though MSEs that add workers or seeking to add labor force make a major contribution to the economic growth of the country (Mead & Liedholm, 1998) and helping more of these enterprises to grow (add workers) can make a greater contribution to unemployment reduction and income generation than equal efforts made for the promotion of new MSEs. Besides, the MSEs that add workers are very important mechanism for helping people to move up and out of poverty since increase in size is often associated with an increase in economic efficiency but, most MSEs are subject to different set of dynamic forces which can affect their growth and reduce their potential contribution to the economic growth of the country. Hence, most MSEs remain the same in size of employment since start up as compared to larger enterprises since the factors

that influence the growth of MSEs are many, complex and erratic.

So that taking these all in to account, it is very essential to systematically analyze the factors that affect the growth of MSEs. Therefore, this study aims to investigate the determinant factors of MSEs growth in Mekelle city, Tigray regional state of Ethiopia in which major emphasis was given to examine the growth status of MSEs, to identify the key factors affecting they growth of MSEs and to critically analyze the causes and consequences.

2. Literature Review

Firm growth is regarded as the most important, reliable and easily accessible measure of a firm's performance (Delmar, 1997) given that badly managed growth may lead to bankruptcy. Even though growth is a complex and multidimensional phenomenon, it goes without saying that a purely internal approach, limited to the impact of the resources and in particular to the determinant factors linked to the manager, neglects the effect of potential variables linked to firm, strategy, environment and interactions between these variables (Janssen, 2002).

Firms that grow in their employment size are few and most others unable to grow and struggling to survive. To analyze the factors that make this difference a lot of studies were carried out (Cheng, 2006; Hasnu & Amjam, 2007; McPherson, 1996; Mead & Liedholm, 1998; Parker, 1995; Wasihun & Paul, 2010) but no theory has been developed specifically to measure the MSEs growth in developing countries. Nevertheless, it is important to review the existing theories on firm growth in order to guide the analysis and to point-out the way in which more complete and appropriate theories can be developed.

2.1 Growth measures

There is a little agreement in the existing literature on how to measure growth thus most previous studies have used a variety of different measures such as total assets, sales, employment size, profit, capital, and others (Berkham et al., 1996; Davidsson & Wiklund, 2000; Holmes & Zimmer, 1994). Moreover, growth has been measured in absolute or relative terms. Perhaps the most common means of firm growth is through relatively objective and measurable characteristics such as growth in sales turnover, total assets and employment size. These measures are relatively uncontroversial, the data tend to be easily available and it increases the scope for cross study comparability (Freel & Robson, 2004). But it is difficult to get reliable time series data on growth of fixed assets/sales (better indicator of growth) and MSEs owners would be unable to report their sales or profits even at the present time expecting that their guesses as to sales of ten years ago would be accurate is folly. Hence, the measurement of growth in terms of changes in the numbers of workers is objective. Interestingly, Evans (1987) reports that estimates using employment size is similar to those that use sales besides growth in sales and growth in the number of workers are highly correlated. Therefore, this study measures the growth of MSEs using employment size. The growth rate of the MSEs is computed following Evans (1987) model i.e.

$$gr = \frac{\ln S_t' - \ln S_t}{entage} = Y^*$$

where $\ln S_t'$ is natural logarithm of current employment size, $\ln S_t$ is natural logarithm of initial employment size, entage is the age of MSEs and gr is growth rate of the enterprises.

3. Materials and Methods

To examine the factors affecting the growth of MSEs, this study draws on empirical evidence from the 2012 survey covering 178 randomly selected MSEs from Mekelle city Tigray regional state of Ethiopia. A semi-structured questionnaire and personal interview were used to collect first hand data. The data collected in this way was classified, summarized and presented using text and table, and analyzed using the descriptive statistical tools like percentages, ratios, mean and standard deviation. In addition, the econometric analysis tool that is binary choice logistic regression model was used to test the literature driven hypothesis and to draw conclusions.

3.1 The Model

In this study MSEs are assumed to be either growing or survival (not growing). Hence the binary choice logistic regression model that assumes dichotomous dependent variable which takes either 1 or 0 value depending on Y^* is used.

$$Y = \begin{cases} 1 & \text{if } Y^* > 0 \\ 0 & \text{if } Y^* \leq 0 \end{cases}$$

In a qualitative response model, the probability that $Y=1$ is given by the sign of the latent variable that is the probability that the latent variable becomes positive.

$$\Pr(Y^* > 0) = \Pr ob(\beta'X + \varepsilon > 0) = \Pr ob(\varepsilon > -\beta'X) = \Pr ob(\varepsilon < \beta'X) = F(\beta'X)$$

The finally employed model becomes:

$$\Pr(Y = 1) = \alpha + \beta_1(\text{genow}) + \log \beta_2(\text{iis}) + \beta_3(\text{entloc}) + \beta_4(\text{entsec}) + \varepsilon$$

Where α the intercept, β_1 - β_4 is the coefficient to be estimated, *genow* is the gender of enterprise owner, *iis* is initial investment size, *entloc* is the enterprise operation location, *entsec* is the enterprise sector of operation and ε is the error term that has a logistic distribution with mean 0 and variance 1. In this binary choice model, each observation is treated as a single draw that is binomial with one draw. The model with growing probability ($Y=1$) of $F(\beta X)$ and independent individual observations leads to the joint likelihood function, given by the sum-product of the probabilities of growing and survival.

3.3 Specifying dependent and independent variable

The dependent variable is a dichotomous variable that represent the growth of MSE that is measured in terms of change in employment size. Taking the calculated growth in employment, MSEs are classified in to two categories i.e., growing (if $gr > 0$) and survival (if $gr \leq 0$) following Cheng (2006) growth classification and represented in the model by 1 for the growing and 0 for survival MSEs. The independent variables that that are critically examined in this study are gender of the owner, initial investment size, location and sectors the MSEs are engaged. Taking this, the following hypotheses were driven.

3.3.1 Gender of owner versus MSEs growth

In most countries, majority of MSEs are owned and operated by women (Mead & Liedholm, 1998). The new start rates for female owned MSEs are substantially higher as compared to male headed MSEs but women owned Micro and small enterprise (WMSE) grow less rapidly than those male owned MSEs (USAID, 2001). The studies made by Liedholm (2001) and Gebreyesus (2007) show that male owned MSEs grow more than double as compared to WMSEs. This gender difference on the growth of MSEs is hypothesized in this study as follow.

Hypothesis 1: Male owned MSEs are more likely to grow faster as compared to women owned MSEs.

3.3.2 Initial investment size versus MSEs growth

Resource endowment, capabilities and competitive advantages are major determinants of firm growth as per resource-based view since resources are basis for profitability and growth (Grant, 1991). MSEs that are started operation with higher initial investment are more likely to grow than their counter parts that are started operation with relatively smaller initial investment (Barney, 1991; Carroll, 1993). Thus, the following hypothesis is formulated in this regard.

Hypothesis 2: Relatively the higher the initial investment sizes of the MSEs, the higher the chance of the MSEs growth.

3.3.3 Location versus MSEs growth

MSEs located at main road side exhibit higher growth compared to MSEs located out of town (Hasnu & Amjam, 2007; Gebreyesus, 2007; Parker, 1995). Moreover, the MSEs operating in commercial districts reveals strong tendency of growth than those which operate at distant areas (McPherson, 1996) therefore this study formulate this hypothesis.

Hypothesis 3: The MSEs that are operating at main roadside (busy street) have higher probability of growth as compared to those MSEs that are operating at out of town (distant area).

3.3.4 Sector versus MSEs growth

MSEs operating in manufacturing and service sector grow faster than those in trade/service (Mead & Leidholm, 1998; Gebreyesus, 2007). MSEs in the construction sector grow more rapidly than enterprises in retailing business (Mcpherson, 1996). Hence, the following hypothesis is formulated.

Hypothesis 4: MSEs that are engaged in manufacturing sectors have higher chance of growth than those MSEs that are engaged in other sectors.

4. Result and Discussion

To determine the status of MSEs, information on the growth measure has to be collected and an appropriate measure of aggregate growth has to be used. Thus, this study used employment size as an objective measure of firm growth since the data used in this study rely on a recall basis as a result other measures are susceptible to measurement errors. Accordingly, as table 1 show out of the total sample 23.6 percent are found growing (42 MSEs) and the remaining 76.4 percent are found survival (136 MSEs). This confirm that about three-fourth of the MSEs are survival type and one-fourth or less of MSEs are growing type in this country as Wasihun and Paul (2010) and Gebreyesus (2007) found even though the growing MSEs percentage is higher as compared to other African countries (Botswana, Malawi, Swaziland and Zimbabwe except Kenya) in which the growing MSEs ranges from 19.3 – 22.8 percent while it is 34.8 percent for Kenya (Liedholm, 2001).

Table 2 shows that out of the total respondents (178 MSEs), 66 percent are male headed MSEs and the rest 34 percent are female headed MSEs. The growing female headed MSEs are accounted for 20 percent of the total

female headed MSEs. On the other hand, growing male headed MSEs are accounted for 25 percent of the total male headed MSEs. Whereas the survival female headed MSEs are accounted for 80 percent of the total female headed MSEs and the survival male headed MSEs are accounted for 75 percent of the total male headed MSEs. It is consistent with the previous studies (Mead & Liedholm, 1998; Gebreyesus, 2007) that found female headed MSEs especially in developing countries are most probably survival type as compared to their male headed counterpart. In this specific survey also the female headed MSEs have a slightly smaller tendency of growth as compared to male headed MSEs but there is a difference in the average growth rate between the female owned MSEs and the male owned MSEs i.e., the WMSEs reveals a smaller mean growth rate (16.1%) where as the mean growth rate of male owned MSEs is higher (19.2%). As a result, the WMSEs have a smaller tendency of growth and are more of survival type as compared to male owned MSEs.

Table 3 shows about 74 percent of the growing and 76 percent of the survival MSEs operates in separate business house (out of home) whereas only 26 percent of the growing MSEs and 24 percent of the survival MSEs operates in their residential house (in home). The MSEs that operate in home shows a higher growth rate (18.5%) than the MSEs that operates out of home (18.2%) since as the interview result reveals, those MSEs that operate in home didn't incur additional expense for house and operate for a maximum hours as compared to out of home. In addition, out of the total respondent, 36.5 percent of MSEs are located at down town, 41 percent are located at main road side, 13.5 percent are located at out of town and the remaining 9 percent are located at traditional market.

Table 4 show that most MSEs (72%) in this study start operation with an initial investment size that ranges from birr 100 – 10,000 since all most all (96.4%) MSEs have no access to formal credit or discriminated by the formal financial institutions (banks/MFIs). The minimum initial investment size for all MSEs is birr 100 where as the maximum initial investment size is birr 800,000 and the overall average initial investment size is birr 25,719.10. The average initial investment size is substantially higher for the growing MSEs (birr 51,547.62) compared to the survival MSEs average initial investment size (birr 17,742.65) and overall initial investment size. The average growth rate is higher for those MSEs that are started operation with an initial investment size that ranges from birr 5001-10,000.

As table 5 reveals, out of the sampled MSEs, urban agriculture and hotel & tourism sectors are found in survival types at all while construction sector found in growing MSEs in this study. Manufacturing and service sectors take the lion share (33 percent each i.e., 66 percent) of the growing and 26 percent of the survival MSEs while the trade sector takes 29 percent of the growing MSEs and 61 percent (majority) of the survival MSEs as compared to manufacturing and service sectors. From those MSEs that are engaged in manufacturing sectors (21 MSEs), 14 MSEs are growing type and the remaining 7 MSEs are survival type. In addition, the manufacturing sector growth rate is very high (26.8%) as compared to other sectors. Whereas from the MSEs (43) that are engaged in service sectors, only 14 MSEs are growth type and the remaining 29 MSEs are survival type. Besides, this sector shows the highest growth rate next to manufacturing sector. This is due the level of initial investment size and labor intake capacity of this sectors and it is consistent with the finding of Gebreyesus (2007) and Liedholm (2001).

Finding the factors that significantly contribute to growth of MSEs goes beyond the descriptive analysis and requires employing econometric analysis. Hence, multivariate econometric analysis helps us to identify factors that significantly influence the extent of growth. As it was discussed in the methodology part of this study, a binary choice logit model is used to identify the major determinants of MSEs growth and to test the literature driven hypotheses. The variables described in the descriptive analysis are used as explanatory variables in logistic model.

As output of the model shown in table 6 reveals, most influential variables that significantly determine the growth of MSEs are gender of owner with an estimated odds ratio of 3.74 ($p < 0.10$), initial investment size (start-up capital) with an odds ratio of 2.05 ($p < 0.05$), location with an odd ratio of 8.14 ($p < 0.05$) for out of town (distant area) located and sector location with an odd ratio of 0.23 ($p < 0.10$) for service and 0.035 ($p < 0.01$) for trade sectors respectively, holding all other factors remains constant.

Ceteris paribus, male owned MSEs was found to have positive relation with growth status of MSEs and statistically significant at 10 percent. The odds ratio of the variable "gender of owner" indicates the probability of growth of MSEs that are owned by male operators is 3.74 times higher than the female owned counterparts. The marginal effect of this variable shows that the probability of growth for male owned MSEs increase by 15.86% as compared to female owned MSEs. Therefore, the first hypothesis that is "*Male owned MSEs are more likely to grow faster as compared to women owned MSEs.*" is accepted and it is consistent with previous studies of Mead and Liedholm (1998) and Mulu (2007). Considering this a number of justifications have been given as to why the female owned MSEs grow slowly than male owned MSEs. In this study, women's are more concentrated in least growing sectors such as trading. As the survey data shows, out of the total female owned MSEs around 67 percent of them are engaged in trade sector. In addition, around 85 percent of women owned

MSEs (WMSEs) start business with an initial capital of below 10,000 birr and as compared to male and the minimum startup capital is birr 100 for women while it is 1000 birr for male counterparts. The WMSES startup capital ranges from 100 – 270,000 birr where as the startup capital for male owned MSEs ranges from 1000 – 800,000 birr. Moreover, women have dual (domestic and productive) responsibility than men, thus the business objective of women is different from men. As a result, women is risk averse than male to maintain their welfare and survival of the household (Mead & Liedholm, 1998; Mulu, 2007).

Similarly, the initial investment size has a positive effect on the probability of being growing as the odd ratio show the probability of being growing increase by 2.05 times as the initial investment size increases by one percent. In addition, the marginal effect (0.10) of implies that, ceteris paribus, the probability of being growth increases by 10 percent as initial investment increases by one percent. As a result, the fourth hypothesis which states “*Relatively the higher the initial investment sizes of the MSEs, the higher the chance of the MSEs growth.*” is accepted. Moreover, in this study as the initial investment increase there is a tendency of shifting from least growing sector such as trading to higher growing sectors such as manufacturing. Besides, the initial investment size ranges from birr 1000-800,000 for growing MSEs but it ranges from birr 100-300,000 for the survival MSEs. Therefore, as the initial investment size of MSEs increases, the probability of becoming graduated from being survival MSEs increases.

Further, the logistic regression results predict that holding other factors constant, the probability of being growing for MSEs that operates at out of town (distant areas) is 8.14 times ($p < 0.05$) higher than those which operates in busy streets (main road side). As the marginal effect shows the probability of being growth increases by 41.8 percent for those MSEs that are operated at out of town as compared to those MSEs that operates at main road side. As a result, the hypothesis that assumes “*MSEs that are operating at main roadside has higher probability of growth as compared to those MSEs that are operating at out of town/distant area*” is rejected. This is due to the fact that MSEs that are operating at out of town are engaged in higher growing sectors, particularly in manufacturing sector and this MSEs have an easy access for input while those MSEs that are operating at main road side are engaged mostly in least growing sectors like trading. In addition, as the MSEs location get out from the center the copycat strategy is reduced which imply that the MSEs that are located at out of town mostly produce differentiated product. As a result they have more and loyal customers than those which operate at main road side (busy street).

Assuming all other factors remains constant, the probability of growth for MSEs that engaged in service sector decreases by 16.7 percent ($p < 0.10$) compared to MSEs that operates in manufacturing sector. Similarly, the probability of growth for MSEs that operate in trade sector decreases by 50.8 percent ($p < 0.01$) than manufacturing sector. Therefore, the sixth hypothesis in this case “*MSEs that are engaged in manufacturing sector have higher chance of growth than others*” is accepted at 1% level of significance since most manufacturing sector MSEs in this study start business with higher initial investment size as compared to MSEs that operate in other sector. The minimum initial investment size for manufacturing sector is birr 5,000 where as it is birr 100 for trade and service sectors. Further most manufacturing sector MSEs are owned by male.

5. Conclusions and Policy Implication

Taking the findings, the study concludes that over three-fourth of the MSEs that are found in Mekelle city are survival MSEs and about one-fourth of them are growing MSEs. The MSEs that are owned by male grow at relatively higher rate of growth as compared to the WMSEs. There is a slight difference in the growth rate between MSEs that are operating in home and out of home but there is a big difference in growth rate among the MSEs that are operating at down town (commercial center), main road side (busy street) and out of town (distant areas). MSEs that start operation with an initial investment size that ranges from birr 5000-10,000 shows the highest growth rate as compared to those which start operation with an initial investment size that exceed 10,000 birr. Manufacturing sectors MSEs grow faster than those in service/ trade sectors. In addition, Female headed MSEs grow slowly than male headed MSEs.

The dimensions and determinants of MSEs growth are vast and complex. The growth of MSEs has a recognized effect on unemployment reduction and poverty alleviation since MSEs have massive contribution in employment creation and income generation than big enterprises but change in employment size in MSEs is subject to different constraints such as financial, working premises and other socio-economic conditions. Thus, proper understanding of these factors and conditions constitutes an essential starting point and is a key to the formulation of policies, designing of appropriate intervention strategies and practical steps by the government, non-government organizations and other stake holders in order to reduce poverty, unemployment and income inequality as well as to promote sustainable growth at micro and macro levels. Furthermore, one of the millennium development goals is reduction of poverty. And currently, unemployment is global agenda. Thus, the government and the NGOs, particularly operating at the local levels should design an awareness creation program to put the already endorsed and existing MSEs development policy and strategy (promotion of existing

MSEs than establishment of new MSEs) in to effect. To this end, more emphasis should be given to make the formal financial institutions (banks & MFIs) affirmative to support MSEs particularly WMSEs through financial services provision and an integrated BDS provision that make the MSEs to be engaged in manufacturing (other growing sector), that reduce the practice of copycat strategy and mass operation in the same sector must catch the attention of the GOs and NGOs in this regard at every level.

References

- Aharoni, Y. (1994) 'How small forms can achieve competitive advantages in an independent world', In Agmon, T. and Drobnick, R. (Eds.), *Small firms in global competition*. Oxford University Press, New York.
- Barney, J. (1991) 'Firm resources and sustained competitive advantage.' *Journal of Management*, 17, pp. 99-120.
- Berkham, R., Gudgin, G., Hart, M. and Hanvey, E. (1996) *The determinants of small firm growth, an inter-regional study in the U.K., 1986-90*, Sassoc Kingsley, England.
- Carrier, C. (1994) 'Entrepreneurship in large firms and SMEs: A comparative study.' *International Small Business Journal*, Vol. 12 No. 3, pp. 54-61 [online] <http://www.highbeam.com/doc/1G1-16078748.html> (Accessed on 9 October 2011).
- Carroll, G. R. (1993) 'A sociological view on why firms differ.' *Strategic Management Journal*, 14, pp. 237-249.
- Cheng, R.W. (2006). *Determinants of growth in small and medium enterprise: An empirical study on logistic industry in Hongkong*. Unpublished PhD thesis, Curtin University of Technology. Australia.
- Davidsson, P. and Wiklund, J. (2000) 'Conceptual and empirical challenges in the study of firm growth', In Sexton, D. and Landström, H. (Eds.), *The blackwell handbook of entrepreneurship* [Online]. Oxford: Blackwell. <http://eprints.qut.edu.au/5571/> (Accessed on 3 November 2011).
- Delmar, F. (1997) 'Measuring growth: Methodological considerations and empirical results', In Donckels, R. & Miettinen, B. (Eds.), *Entrepreneurship and SME research: on its way to the next millennium*. Aldershot, Ashgate, United Kingdom.
- Drilhon, G. and Estime, M. (1993) *Technology watch and the small firm*. [Online] OECD Observer. Paris. <http://www.questia.com/googleScholar.qst?docId=98937597> (Accessed on 6 August 2011).
- Evans, D. S. (1987) 'Test of alternative theories of firm growth.' *Journal of Political Economics*, 95(4), pp. 657-674 [Online] <http://www.jstor.org/stable/pdfplus/1833253.pdf> (Accessed on 8 July 2011).
- Federal Democratic Republic of Ethiopia (FDRE): Ministry of Trade and Industry (MTI). (1997). *Micro and small enterprises development strategy* [Online]. Addis Abeba, Ethiopia. <http://www.bds-ethiopia.net/1.../other/MSE%20Strategy%20for%20Ethiopia.doc> (Accessed on 14 June 2011).
- Freel, M. and Robson, P. (2004) 'Small firm innovation, growth and performance.' *International Small Business Journal*, 22 (6), pp. 561-575 [Online] <http://icc.oxfordjournals.org/content/20/4/1049.full.pdf+html> (Accessed on 16 February 2011).
- Gebreyesus, M (2007) *Growth of micro-enterprises: Empirical evidence from Ethiopia*. [Online] Ethiopian Development Research Institute (EDRI). <http://www.csae.ox.ac.uk/conferences/2007-EDIA-LaWBiDC/papers/275-Gebreyesus.pdf> (Accessed on 11 June 2011).
- Grant, R. M. (1991) 'The resource-based theory of competitive advantage: Implications for strategy formulation.' *California Management Review*, 33, 3 ABI/INFORM Global
- Hasnu, S. and Amjam, S. (2007) 'Factors determining success of microenterprises: Evidence from district Peshawar.' *Gomal University Journal of Research*, 23, pp. 38-45 [Online] [http://www.gu.edu.pk/GUJR/PDF/pdf%20june%202007/No-6Determining%20Successof%20\(Hasnu%20\).pdf](http://www.gu.edu.pk/GUJR/PDF/pdf%20june%202007/No-6Determining%20Successof%20(Hasnu%20).pdf) (Accessed on 16 September 2011).
- Holmes, S. and Zimmer, I. (1994) 'The nature of small firm: Understanding the motivations of growth and non-growth oriented owners.' *Australian Journal of Management*, 19(1) [Online] <http://aum.sagepub.com/content/19/1/97.extract> (Accessed on 18 September 2011).
- International Labor Organization. (2002). *Women and men in the informal economy: A statistical picture* [Online]. International Labor Office, ILO Geneva. <http://info.worldbank.org/etools/docs/library/76309/dc2002/proceedings/pdppaper/module6ilo3.pdf> (Accessed on 12 November 2011).
- Janssen, F. (2002) *Determinants of SMEs' employment growth relating to the characteristics of the manager*. Unpublished PhD thesis, University Jean Moulin, France.
- Liedholm, C. (2001) *Small firm dynamics: Evidence from Africa and Latin America*. [Online] The International Bank of Reconstruction and Development, Washington D.C., USA: The World Bank. <http://siteresources.worldbank.org/WBI/Resources/wbi37189.pdf> (Accessed on 26 July 2011).
- McPherson, M. A. (1996) 'Growth of micro and small enterprises in South Africa.' *Journal of Development Economics*, Vol. 48 pp. 253-277.
- Mead, D. C. and Liedholm, C. (1998) *Dynamics of micro and small enterprises in developing countries*. [Online] *World development*, 26(1), pp. 61-74. <http://www.edgegrowth.com/>

- Portals/0/Documents/Seminal%20Docs/SMME%20dynamics%20in%0Africa%20and%20developing%20nations.pdf (Accessed on 16 July 2011).
- Mulhern, A. (1995) 'The SME sector in Europe: A broad perspective.' *Journal of Small Business Management*, 33(3), 83-7 [Online] <http://business.highbeam.com/138001/article-1G1-17438234/sme-sector-europe-broad-perspective> (Accessed on 6 August 2011).
- Parker, J. (1995) *Patterns of business growth: Micro and small enterprises in Kenya*. Unpublished PhD dissertation, Michigan State University, East Lansing, Michigan.
- USAID (2001). *USAID Micro enterprise development briefs, A compilation of briefs issued from February 1995 through October 1998*. Office of Micro Enterprise Development Bureau for Economic Growth and Agricultural Development, USA.
- Wasihun, R & Paul, I (2010) 'Growth determinants of women operated micro and small enterprises in Addis Ababa.' *Journal of Sustainable Development in Africa*, 12(6), pp. 233-246. [Online] [http://www.jsd-africa.com/Jsda/V12No6_Fall2010_B/PDF/Growth%20Determinants%20of%20Women-Operated %20Micro%20and%20Small%20](http://www.jsd-africa.com/Jsda/V12No6_Fall2010_B/PDF/Growth%20Determinants%20of%20Women-Operated%20Micro%20and%20Small%20) (Accessed on 6 August 2011).

Annex:

Table 1 Status of MSEs

<i>MSEs category</i>	<i>Number of MSEs</i>	<i>Percent (%)</i>
Growing	42	23.6
Survival (non-growing)	136	76.4
Total	178	100

Source: Stata result from survey data (2012).

Table 2 Status of MSEs by gender of MSEs owners

<i>Variable</i>		<i>Growing MSEs</i>		<i>Growth Rate*</i>			<i>Survival MSEs</i>		<i>Total</i>	
		<i>No</i>	<i>Percent</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>No</i>	<i>Percent</i>	<i>No</i>	<i>Percent</i>
Gender	<i>Female</i>	12	29	0.05	0.23	0.161	48	35	60	34
	<i>Male</i>	30	71	0.04	0.65	0.192	88	65	118	66
	<i>Total</i>	42	100	0.04	0.65	0.183	136	100	178	100

Source: Stata result from survey data (2012).

* Indicates growth rate is for growing MSEs only

Table 3 Status of MSEs by areas of operation

<i>Variable</i>		<i>Growing MSEs</i>		<i>Growth Rate</i>			<i>Survival MSEs</i>		<i>Total</i>	
		<i>No</i>	<i>Percent</i>	<i>Min.</i>	<i>Max.</i>	<i>Mean</i>	<i>No</i>	<i>Percent</i>	<i>No</i>	<i>Percent</i>
Operation condition	<i>In-home</i>	11	26	0.05	0.31	0.185	32	24	43	24
	<i>Out of home</i>	31	74	0.04	0.65	0.182	104	76	135	76
	<i>Total</i>	42	100	0.04	0.65	0.183	136	100	178	100
Location	<i>Down town</i>	17	40	0.05	0.65	0.199	48	35.2	65	36.5
	<i>Main road side</i>	18	43	0.07	0.28	0.187	55	40.3	73	41
	<i>Traditional Mkt</i>	-	-	-	-	-	16	12	16	9
	<i>Out of town</i>	7	17	0.04	0.22	0.132	17	12.5	24	13.5
Total		42	100	0.04	0.65	0.183	136	100	178	100

Source: Stata result from survey data (2012).

Table 4 Status of MSEs by the initial investment size

Variable	Range (ETB)	Growing MSEs		Growth Rate			Survival MSEs		Total	
		No	Percent	Min.	Max.	Mean	No	Percent	No	Percent
Initial investment size	100-1000	2	5	0.17	0.17	0.170	12	9	14	8
	1001-5000	7	17	0.05	0.23	0.108	50	37	57	32
	5001-10000	11	26	0.07	0.65	0.244	46	34	57	32
	10001-50000	12	28	0.09	0.35	0.233	22	16	34	19
	50001-100000	5	12	0.04	0.22	0.152	2	1	7	4
	100000-500000	4	10	0.07	0.09	0.079	4	3	8	4.5
	500001-1000000	1	2	0.04	0.04	0.04	-	-	1	0.5
Total		42	100	0.04	0.65	0.183	136	100	178	100
	<i>Mean</i>	51547.62		0.183			17742.65		25719.1	
	<i>SD</i>	126952		0.138			46707.4		74862.41	
	<i>Minimum</i>	1000		0.041			100		100	
	<i>Maximum</i>	800000		0.65			300000		800000	

Source: Stata result from survey data (2012).

Table 5 Status of MSEs by the sector

Variable	Growing MSEs		Growth Rate			Survival MSEs		Total	
	No	Percent	Min.	Max.	Mean	No	Percent	No	Percent
Construction	2	5	0.09	0.09	0.09	-	-	2	1
Hotel & Tourism	-	-	-	-	-	2	1.5	2	1
Manufacturing	14	33	0.08	0.65	0.268	7	5	21	12
Service	14	33	0.04	0.34	0.146	29	21	43	24
Trade	12	29	0.05	0.23	0.146	96	71	108	61
Ur. agriculture	-	-	-	-	-	2	1.5	2	1
Total	42	100	0.04	0.65	0.183	136	100	178	100

Source: Stata result from survey data (2012).

Table 6 Output of the model (logistic)

Variables	Odds ratio	P> z	Marginal effects (dy/dx)
Gender of MSEs owner	3.736918	0.097***	.1586903
Initial investment size of MSEs	2.047728	0.027**	.1004287
Location (reference Main road side)			
Down town	3.306261	0.118	.1784821
Out of town	8.141648	0.043**	.4181527
Sector (reference Manufacturing)			
Service	.232882	0.060***	-.1670204
Trade	.035697	0.000*	-.5081790

Source: Stata result from survey data (2012)

*, **, *** represent the level of significance at 1%, 5%, and 10% respectively

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