Assessment on the Determinant Factors for Transformation of Business Enterprises: Cross-Sectional Study Design on Ethiopian Micro, Small and Medium Enterprise

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Abstract

Micro and small enterprises are the key for most developed and developing countries' economy, due to the fact that micro and small enterprises play in creating employment opportunity and supporting large manufacturing companies in the economy. This research assessed "the determinant factors for micro and small enterprises transformation in to medium level industry in Addis Ababa City Administration" by taking a sample of 74 transformed micro and small enterprises from different sectors in 10 sub cities. The study was an explanatory design more of quantitative in nature and cross-sectional approach   Data collected from 74 transformed micro and small enterprises in Addis Ababa City Administration using a pre designed person assisted questionnaire. The regression analysis results provide evidence that finance access, management know how, market access, accounting and record keeping is positively and significantly related with average capital growth. Poor infrastructure and the support micro and small enterprises get are negatively and significantly related with average capital growth and average employment growth respectively but no relationship between technology and government rules and regulations with both average capital growth and average employment growth.
Keywords: MSEs, Transformation, Determinant factor, Addis Ababa, Medium level industry, Enterprise

1.   Background of the study

According to government of Ethiopia, Micro Enterprises are those business enterprises engaging up to 5 persons including self-employment and with total assets not exceeding Birr 200,000 and Small Enterprises are those business enterprises engaging between 6 and 30 persons and with total assets of above Birr 200,000 and not exceeding Birr 1.5million and Medium enterprises are that employed more 30 persons with capital of more than 1.5 million Birr (FeMSEDA, 2011).

In Ethiopia, about half of the urban workforce is engaged in the informal sector and Addis Ababa nearly accounts for about 40% of the total operators in micro enterprise activities (Rahael, 2010). The government of Ethiopia under the (FeMSEDA, 2010) support package classifies the micro and small enterprises stages of development as startup, growth and maturity. Enterprise transformation means an enterprise that use the support given by the government and transform to the next level by fulfilling the requirement of transformation to the next level. This transformation includes from start up to growth, from growth to maturity and from maturity to medium industry. Medium enterprise is an enterprise that fulfills the requirement (capital and employment) set for a company and transform from maturity to medium enterprise.

Resource-based theories hold that enterprises with valuable, rare and inimitable resources have the potential of achieving superior outcomes and the source of competitive advantage is possession of resources, skills, and abilities that is valuable, rare, and difficult to imitate by competitors (Wiklund and Shepherd, 2003).

According to (Hisrich and Peters, 2010) all entrepreneurs are not the same. Different entrepreneurs have different cultural and educational backgrounds, family structures and situations. Therefore, there is no such thing as a "true entrepreneurial profile". According to (Sahar, 2010) accessing finance is a make-or-break issue for many micro and small enterprises in the developing world and also included that lack of formal credit often hinders these enterprises from formal entry or from developing their potential.

In Ethiopia also (FeMSEDA, 2010) MSEs cite the lack of finance as the greatest constraint to their growth and development, whether they are formally registered or not and are constantly facing the problem of infrastructural bottlenecks. A research conducted by (Shakantu, 2006, Indarti and Langenberg, 2008, Keil, 2007) reveals that managerial expertise is an important factor for the success of MSEs and the scarcest resources of the enterprise and technology has a close relationship with improvement of production process. The majority of informal enterprises in Ethiopia target the low income market areas because of low entry barriers in the market, moreover, micro and Small Enterprises (MSE) are regarded as the driving forces of economic growth, job creation, and poverty reduction in developing countries and they have been the means through which accelerated economic growth and rapid industrialization have been achieved (Endalkachew, 2008). He also identifies the causes for the failure of MSEs as internal and external factors: access to financial services, limited access to business development services, limited market, poor supply of economic infrastructure and public, services, complex and burdensome government regulations, and policy environment.

According to (FeMSEDA, 2011) in Ethiopia the major obstacles for the transformation of MSE in to

medium level industry include lack of access to finance, working premises, luck of skills and managerial expertise, lack of market access, infrastructure, information and technology.

Empirical Studies on micro and small-business development has shown that the rate of failure in developing countries is higher than in the developed world (Arinaitwe, 2006). In Ethiopia the practice of keeping a track of both financial and non-financial records by entrepreneurs and MSEs are very low (FeMSEDA, 2010). A research conducted by (Indarti and Langenberg, 2008) also identifies the determinant factors for MSE success includes capital access, marketing, and technology. In addition to Indarti and Langenberg,2008, Keil, 2007) identifies persistence and determination, experience, entrepreneurial personality, business knowledge, a great team and education as the determinant factors for micro and small enterprise success and growth.

According to (Dawoe, 2006) in spite of the monetary, fiscal, regulatory and development policies, there has not been a significant transformation in the activities of micro enterprises from subsistence living to small or medium scale enterprises for job and wealth creation which are essential for poverty reduction and sustainable development . In Ethiopia, most enterprises failed to transform from micro level to small level, small level to medium level and from medium level to large scale enterprise because of different factors.

In Ethiopia most, studies simply identifies the problems for the growth and expansion of MSEs. They didn‟t show the relationship between growth and the explanatory variables that explained growth and expansion. A study conducted by (Solomon, 2004, Mulu, 2007) reveals the determinant factors for the growth of MSE, but doesn’t show the factors origin whether it is from the owner or the firm or other origins. In turn, the main contribution of this study was to identify the determinant factors for MSE transformation in to medium level and to describe the entrepreneurial and enterprise characteristics in study area.

Conceptual Framework - There are many factors that contribute for the transformation of MSE in to medium industry. According to (FeMSEDA, 2010) there are three type of transformation in MSEs of Ethiopia. These are transformation from micro enterprise in to small enterprise, transformation from small enterprise in to medium level enterprise and transformation from medium scale industry in to large scale.

The conceptual framework for this study is based on the review of literature discussed above and compiled as follows: *Figure 1: Conceptual framework of the study*

Source: Developed by Researcher
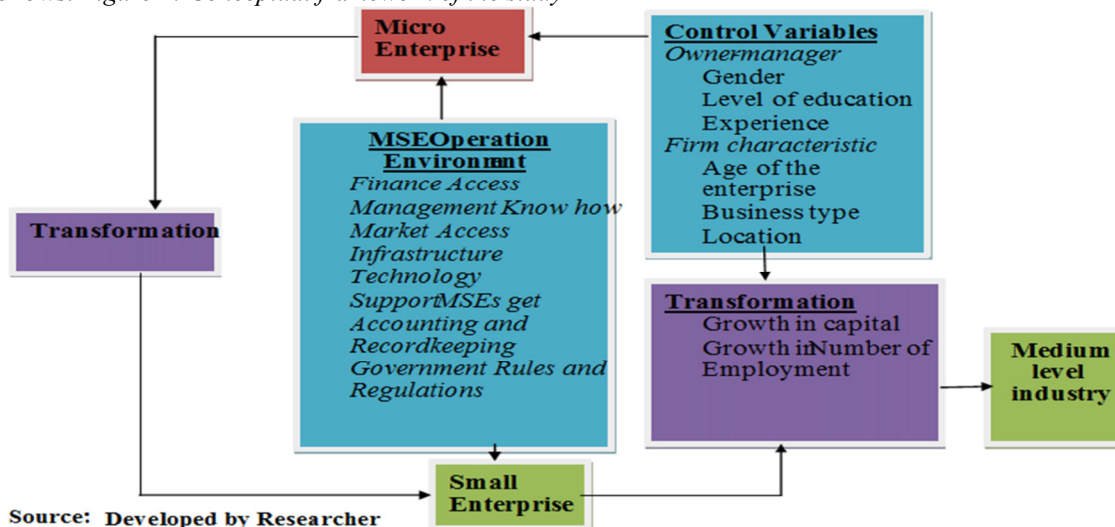
1.1.   Materials and Methods

Research Design - This study was an explanatory research and data was collected through cross-sectional study approach. The research design in this study also uses a descriptive, to describe the owner-manager, the enterprise and the business practice characteristics of the enterprise.

Method of Data collection- Two instruments were used to collect data: the demographic questionnaire (DQ) that used to measure the owner manager characteristics, the MSE characteristics and the enterprise characteristics, and MSE questionnaire (MSEQ). The MSEQ were consists of 48 items 6 questions for each independent variables related to the common operations that determine MSE to transform in to medium level industry, based on the questionnaire prepared by (Indarti and Landenberg, 2008) and adapted to the situation of MSEs in Ethiopia.

Sampling Design -The population for this study was obtained from the Addis Ababa City administration MSE development agency. The agency were transformed 241 MSE in to medium industry from different sectors in May, 2011. The sample of the study were selected using a survey technique and consists of 74 transformed MSEs located in Addis Ababa city administration.

Sampling Techniques- The numbers of enterprises to be questioned (sample size) were obtained, using

Yamane's formula. The formula states:

n $= \frac{N}{1+N(e)2} = \frac{241}{1+241(.1)2}$ = 74, Where n   Sample size, N-population, e-Margin of error of 0.1

Method of data analysis - The Kolmogorov-Smirnov test were used to determine the normality of the data. In this study descriptive statistics were used to describe the owner- manager characteristics; the MSE characteristics and the MSEs business practices. The study used the Pearson Product Moment Correlation method to show the relationship between variables. Multiple regression analysis model was undertaken to show the simultaneous impact of the independent variables on the dependent variable.

The Statistical Package for Social Sciences (SPSS) were used in the analysis of the data collected in this research and the results of analysis were presented using tables.

Dependent Variables - In this study, dependent Variables were variables that are used to measure the transformation of MSE in to medium industry, such as: **Growth in capital,** "average annual growth rate (AAGR)" that computed by [(current capital−initial capital)/initial capital]/ firm age], and **employment growth** which is the number of employees both permanent and temporarily employed by the enterprise. AEGR were used in the study and calculated as: **[(Current employment -initial employment) /initial employment]/ firm age**

Independent Variables - These factors includes: Finance Access, Management Know-how, Market Access, Infrastructure, Technology, Support MSEs get, Accounting and Record keeping, Government rules and regulations about MSE.

Control Variables- This study also include two categories of control variables owner-managers" attributes (gender, owner's level of education and experience of the owner) and a firm's characteristics (age of the enterprise, industry type and location).

Hypothesis

Hypothesis 1: There is no significance relationship between finance access for MSE and MSE Transformation

Hypothesis 2: There is no significance relationship between management know-how and MSE Transformation

Hypothesis 3: There is no significance relationship between market access for their product and MSE Transformation

Hypothesis 4: There is no significance relationship between poor infrastructure and MSE Transformation

Hypothesis 5: There is no significance relationship between technology and MSE Transformation

Hypothesis 6: There is no significance relationship between the support MSE get and MSE Transformation

Hypothesis 7: There is no significance relationship between adequate accounting and record keeping and MSE Transformation

Hypothesis 8: There is no significance relationship between government rules and regulations towards MSE and MSE Transformation

Model Specification- The following general econometric model was used to estimate quantitatively the transformation of MSE in to medium level industry in Addis Ababa city Administration.

$T_i = \beta_0 + \Sigma\beta_i X_i + \varepsilon_i$ where: T_i are the ith observation of dependent variables; β_0 is the constant or intercept term; β_i are the coefficients of the X_i variables; X_i are the ith observation of the explanatory variables; ε_i is the error term of the models

Ti is MSE transformation, measured by employment growth and capital growth and when the above general model is changed into the specified variables of this study, the regression equations were as follows to estimate transformation of MSE in to medium level industry:

TC (t')-(t)]/μ= β0 + β1 (FIN) + β2 (MGMT) + β3 (MKT) + β4 (INF) + β5 (TEC) + β6 (SUP) + β7 (BAK) + β8 (GOV) + β9 (Gen) + β10 (Edu) + β11 (Exp) +β12 (Age) + β13 (B typ) + β14 (Loc) + ε………………………(1)

EMP (t')-(t)]/μ= β0 + β1 (FIN) + β2 (MGMT) + β3 (MKT) + β4 (INF) + β5 (TEC) + β6 (SUP) + β7 (BAK) + β8 (GOV) + β9 (Gen) + β10 (Edu) + β11 (Exp) +β12 (Age) + β13 (Btyp) + β14 (Loc) + ε ……………………… (2)

Where: TC=Capital growth, FIN= Finance access, MGMT= Management Know-how, MKT=Market Access, INF=Infrastructure, TEC= Technology, SUP= Support MSEs get, BAK= Accounting and Record keeping, GOV=Government rules and Regulations, Edu=Level of owner's education, Exp= experience of the owner, Age= age of the owner, Btyp=Business type of the enterprise, Loc=Location of the business, EMP=Employment growth, Gen=Gender of the owner, ε =the error term of the model.

1.2.   Results and Discussion
Results of Descriptive Statistics
According to the survey, 75.7 % (56) of the MSE operators are males & this implies that men own most of the

transformed MSEs in Addis Ababa City Administration. This is in support of (Solomon, 2004, Rahael, 2010, Mulu, 2007, Endalkachew, 2008). The age ranges of the transformed MSE owners/managers surveyed are-18-34(51.4%), 35-45(32.4%), 45-60(14.9%), and above 60 (1.4%) years of old. Most of the transformed MSE owners/managers surveyed are young and productive people and the educational levels of the MSE operators are; 1.4% illiterate whereas 12.2% elementary school, 16.2% junior school, 39.2% senior secondary school, 31.1% university level. The mean experiences of the owners/managers are 10.5 years with range of 22 years. This implies that experience of the business owners/managers is an important thing for the transformation of MSEs in to medium level industry in Addis Ababa city administration.

Table.1. Demographic variables of owners-managers and characteristics of enterprise

Variables	Category	Number	percentage
Owner's age	18-34	38	51.4
	35-45	24	32.4
	45-60	11	14.9
	above 60 years	1	1.4
	Total	74	100
Level of education	Illiterate	1	1.4
	Elementary school	9	12.2
	Junior school	12	16.2
	Senior .S. school	29	39.2
	University level	23	31.1
	Total	74	100
Sector	Construction	24	33
	Metal and wood works	38	52
	Food preparation	3	4
	Textile and Garment	4	4
	Others	5	7
	Total	74	100
Location	Near to market	5	6.8
	Near to raw material	5	6.8
	Near to infrastructure	15	20.3
	Suitable location	43	58.1
	Inconvenient	6	8.2
	Total	74	100
Form of ownership	Sole proprietorship	33	44.6
	Partnership	11	14.9
	Private limited company	13	17.6
	Corporation	1	1.4
	Cooperative	16	21.6
	Total	74	100
Motive for start it	To be your own boss	23	33.1
	not waged employment	4	5.4
	To realize a dream	29	39.2
	better financial position	8	10.8
	a better quality of life	10	13.6
	Total	*74*	*100*
Sources of finance at start up	Own saving	47	63.5
	Credit from formal sources	9	12.2
	Credit from informal sources	6	8.1
	Equib	1	1.4
	Support from family/friends	5	6.8
	Selling personal assets	2	2.7
	Aid from the government and NGO	3	4.1
	Others	73	98.6
	Total	1	1.4

Source: the survey result, 2012

From the above table, construction (33%), textile and garment (4%), food processing (4%), metal and wood works (52%) and others (7%). Most of the transformed MSEs (60%) were engaged in construction and

metal and wood works and most of the enterprises are located in suitable location that have access to market, access to infrastructure, access to raw materials and access to all of the above requirements for business operation. Majority of enterprises were registered as sole proprietorship (44.6%) followed by cooperatives (21.6%), private limited companies (17.6%), partnership (14.9%) and corporations (1.4%). This clearly indicates that most of the transformed MSEs are established as a sole proprietorship. This is consistent with the findings of (Solomon, 2004, Endalkachew, 2007). Similar to report by (Solomon, 2004 and Enadalkachew, 2007), the findings indicated that the motivation for business start-ups as reported by entrepreneurs themselves is to become independent and autonomous and to realize their dream.

This implies that MSE operators have less access of credit from banks and micro finance institutions. The table also shows that the majority of initial source of financing for micro and small enterprises in Addis Ababa comes from personal savings, household assistance, and financial assistance from their relatives and friends. Credit for startup both from formal and non-formal financial markets is relatively rare. This is consistent with the findings of (Solomon, 2004, Endalkachew, 2007, Mulu, 2007 and Pamela et.al, 2007). The mean starting capital of the enterprises was Birr 79,164.86 with a range of Birr 650,000 and the mean current capital of the transformed MSEs has Birr 2,919,631.17 with a range of Birr 6,641,853.

Correlation Analysis- The descriptive statistics in Appendix-A shows the average values, with their respective variations, and the minimum and maximum values of the variables of the study. Pearson correlation between explanatory variables (correlation coefficients between two independent variables and two control variables) is also used to test the multicollinearity problem of the models of the study. The rule of thumb for multicollinearity problem is that, if the pair wise or zero order correlation coefficient between two independent variables is high, in excess of 0.8, then multicollinearity is a serious problem (Gujarati, 2004).

 The correlation of random split-halves for internal consistency for the MSEQ ranged from 0.82 to 0.861 and the Cronbach alpha for MSEQ was 0.89. In the following two Pearson correlation tables, which are part of appendix C and appendix D, the P-values are listed in parenthesis, which indicates the significant level of variables.

Correlation analysis-Average capital growth rate as a MSE transformation proxy

Below, Table 4.9 shows, the correlation matrix that predicts the likely relationship of average capital growth with other variables.

Table 4.9: Correlations (Pearson) analysis- Average capital growth as a transformation proxy

Variables	ACG	Sig.
Finance access	.377	.000
Management know-how	.276	.009
Market access	.329	.002
Poor infrastructure	-.152	.098
Technology	.403	.000
Support MSEs get	.025	.415
Accounting and record keeping	.281	.008
Government rules and regulations	.004	.487
Age of the enterprise	-.168	.077
Experience of the owner/manager	.051	.334
Dummy gender	.194	.049
Dummy education	-.221	.029
Dummy textile	-.090	.223
Dummy food processing	.158	.089
Dummy metal and wood works	-.069	.280
Dummy other sectors	-.084	.237
Dummy construction	.063	.296
Dummy inconvenient location	-.119	.155
Dummy near to market	-.081	.247
Dummy near to raw material	-.098	.202
Dummy near infrastructure	.270	.010
Dummy suitable location	-.059	.309

Source: the survey result, 2012

From table 4.9 above, the correlation coefficients of finance, management know-how, market access, infrastructure, technology and accounting and recordkeeping with average capital growth are 37.7 percent, 27.6 percent, 32.9 percent, -15.2 percent, 40.3 percent and 28.1 percent respectively. This indicates that relatively a strong association of finance access, market access and technology with average capital growth in contrast with management know-how, infrastructure, and accounting and record keeping.

Level of education and age of the enterprise are negatively correlated at 10 percent and 5 percent level of significance with average capital growth. As it is observed on the coefficients values, gender and location near to infrastructure are weakly correlated at 19.4 percent and at -28.8 percent with average capital growth. But experience of the owner, location except near to raw-material and type of industry except the food processing are correlated insignificantly.

Correlation analysis-Average employment growth rate as a MSE transformation proxy

Below, Table 4.10 shows, the correlation matrix that predicts the likely relationship of average employment growth with other variables. This table also shows the linear relationships between each independent variables and control variables used in this study.

Table 4.10: Correlations (Pearson) analysis- Average employment growth as a transformation proxy

Variables	AEG	Sig.
Finance access	.116	.163
Management know-how	.196	.047
Market access	.173	.070
Poor infrastructure	-.297	.005
Technology	.015	.451
Support MSEs get	-.086	.232
Accounting and record keeping	.240	.020
Government rules and regulations	-.058	.312
Age of the enterprise	-.456	.000
Experience of the owner/manager	-.227	.026
Dummy gender	-.039	.371
Dummy education	.041	.364
Dummy textile	-.040	.366
Dummy food processing	.384	.000
Dummy metal and wood works	-.063	.297
Dummy other sectors	-.023	.422
Dummy construction	-.104	.188
Dummy inconvenient location	-.048	.343
Dummy near to market	-.080	.248
Dummy near to raw material	.108	.180
Dummy near to infrastructure	-.131	.133
Dummy suitable location	.122	.150

Source: the survey result, 2012

In table 4.10, using the Pearson correlation, independent variables; management know-how is significant at 5 percent level, market access is significant at 5 percent level, poor infrastructure is significant at 1 percent level, and accounting and recordkeeping are significantly correlated at 1 percent level of significance with average employment growth respectively. Except poor infrastructure the other variables are correlated positively. However finance access, technology, support MSE get, and government rules and regulations are correlated insignificantly.

From table 4.10 above, the correlation coefficients of management know-how, market access, infrastructure, accounting and recordkeeping with capital are 19.6 percent, 17.3, -29.7 percent and 24 percent respectively. This indicates that relatively a strong negative association of infrastructure with average capital growth in contrast with management know-how, market access and accounting and record keeping. Furthermore, as it can be seen in table 4.10, the control variables; experience the owner/manager and age of the enterprise are negatively correlated with average employment growth and industry type of food processing are positively correlated at 5 percent level of significant, age of the enterprise is correlated at 1 percent level of significant. As it is observed on the table coefficients values of experience of the owner/manager, age of the enterprise and food processing industry are correlated at -22.7 percent, -45.6 percent and 38.4 percent with average employment growth. But gender of the owner/manager, levels of education, and other type of the business and location of the enterprise are correlated insignificantly. Here, as predicted by the Jovanovich model of firm growth, among this sample of surviving firms, younger firms grow faster. The relationship of average capital growth with respect to age of the enterprise is negative over our sample space. The negative sign of the coefficient for age of the enterprise is statistically significant at 10 percent significant level, indicating that in the case of our sample, growth decreases at an increasing rate with the age of the firm.

Econometrics analysis-

In order to test the research hypothesis, two linear regression models were computed. Kolmogorov-Smirnov test was used to determine normality distribution and White's /Breusch-Pagan test for heteroscedasticity problem of

the data sets. As the results indicated in the appendix, both models have no heteroscedasticity and normality problem and also no multicollinearity problem as showed above in the correlation analysis of the two models. Table 4.11 below, shows the regression result of the two models of this study by using both the summery of regression table and ANOVA table.

Table 4.9: Summary of regression analysis for the study variables

Variables	Capital growth				Employment growth			
	Coef	Std.Err	t	Sig.	Coef	Std.Err	t	Sig.
Finance access	.452	11.648	2.827	.007*	.098	.455	.571	.570
Management know-how	.268	8.127	2.451	.018**	.170	.317	1.456	.151
Market access	.206	8.454	1.700	.095***	.072	.330	.555	.582
Poor infrastructure	-.118	8.213	-1.065	.292	-.237	.321	-2.001	.050***
Technology	.109	13.717	.585	.561	.044	.536	.221	.826
Support MSEs get	.369	16.502	2.399	.020**	-.234	.644	-1.420	.161
Accounting & record keeping	.307	9.822	2.431	.018**	.166	.384	1.224	.226
Government rules & regulation	.095	8.016	.874	.386	-.096	.313	-.822	.415
Experience of the owner	.082	1.979	.520	.605	.172	.077	1.020	.312
Age of the enterprise	.129	4.031	.865	.391	-.385	.157	-2.408	.020**
Dummy Gender	.008	18.453	.066	.948	-.181	.721	-1.413	.164
Dummy Education	-.128	16.790	-1.139	.260	.093	.656	.772	.443
Dummy Textile sector	-.139	32.942	-1.241	.220	.138	1.287	1.144	.258
Dummy Food sector	-.104	32.760	-.843	.403	.241	1.279	1.814	.075***
Dummy Metal & wood	-.182	15.789	-1.550	.127	-.008	.617	-.060	.953
Dummy Others sector	-.093	37.510	-.830	.410	.046	1.465	.384	.702
Dummy inconvenient location	.111	34.356	.785	.436	.113	1.342	.748	.458
Dummy near to market	-.204	29.750	-1.665	.102	.023	1.162	.172	.864
Dummy near to infrastructure	-.237	30.281	-2.069	.043**	.171	1.183	1.389	.171
Dummy suitable location	-.201	18.591	-1.449	.153	.270	.726	1.815	.075***
Sample				74				74
F(20-53)				3.082 (P=0.001)				2.338(P=0.007)
R-Square				0.538				0.469
Adj R square				0.363				0.268
*** Indicates statistically significant at 10 percent Level of significant								
** Indicates statistically significant at 5 percent Level of significant								
* Indicates statistically significant at 1 percent Level of significant								

Source: survey result, 2012

As it is summarized in table 4.11 above, 53.4 % of the changes in average capital growth and 46.9% of the changes in average employment growth are successfully explained by the variables used in the two models. These results indicate the overall goodness-of-fit of the models used in this study is better than that was reported by Chami and Papadaki (0.181), Evans (0.1438), and Solomon (0.258) and Mulu (0.12).

Moreover, the overall significance of the two models, when measured by their respective F- Statistics of 3.082 and 2.338 with P-values of 0.001 and 0.007 respectively; indicates that the mentioned factors have a significant effect on the transformation of MSE in to medium level industry in Addis Ababa City administration.

Table 4.11, indicates that MSEs transformation is positively related with the increase in finance access which means that, the higher the amount of financial access, the higher the transformation achievement is and vice versa. Finance access are statistically significance at 1 percent level of significance for average capital growth, however, statistically insignificant for average employment growth, hence that there is a significant relationship between finance access and MSEs transformation in to medium level industry. This outcome in line with found by (Solomon, 2004, Pamela et.al, 2007) that reported a significant negative relationship between lack of finance and micro and small enterprise performance.

The implication of this result is that for the transformed MSEs in Addis Ababa, there is a positive relationship between transformation and management know how of the owners/managers. This means that the more the level of owners/managers management know-how the higher the transformation of MSEs in to medium level industry and vice versa. This is consistent with the findings of (Chami and Papadaki, 2002, Pamela et.al, 2007and Mulu, 2007).

Market access is statistically significant at 10 percent level of significance for average capital growth and statistically insignificant for average employment growth. The coefficients of market access imply that MSEs transformation is positively related with the increase in market access which is, the higher the amount of

market, the higher the transformation achievement is possible.

Thus, similar to (Chami and Papadaki, 2002, Solomon, 2004), there is a significant positive relationship between market access and MSEs transformation. The relationship between poor infrastructure and the two transformation measures is statistically insignificant for average capital growth but significant for average employment growth at 10 percent significant level. Poor infrastructure has negatively related with MSEs transformation significantly. This finding consistent with found by (Pamela et.al, 2007 and Solomon, 2004), which reported a significant negative relationship with poor infrastructure and micro and small enterprise performance.

Table 4.11 indicated that technology is statistically insignificant for both average capital growth and average employment growth. Thus, there is no significant positive relationship between technology access and MSEs transformation. Surprisingly, (Langenberg and Indarti, 2008) also reported insignificant relationship between technology and enterprise growth.

The support MSE get is statistically significant at 5 percent level of significance for average capital growth and statistically insignificant for average employment growth. The coefficients of support imply that MSEs transformation is positively related with the increase in support MSEs get. In other words, the higher the amount of support MSEs get, the higher the transformation achievement is realized. Thus, there is a significant positive relationship between the support MSEs get and MSEs transformation and consistent with most findings (Nichter and Goldmark, 2009). However, (Langenberg and Indarti, 2008) reported a negative insignificant relationship between support and MSEs growth, this finding is

The Skill of accounting and recordkeeping is statistically significant for average capital growth at 5 percent level and statistically insignificant for average employment growth. The implication of this result is that, there is a significant relationship between the transformation in to medium level industry and accounting and recordkeeping skill for MSEs. Therefore, similar to found by (Mwangi, 2011) having recordkeeping and accounting records is a factor for their transformation in to medium level industry. The relationship between government rules and regulations and the two transformation measures is not statistically significant. This means that government rules and regulations have no predicative capability in the presence of other independent variables.

Thus, there is no significant relationship between government rules and regulations and MSEs transformations. Study made by (Langenberg and Indarti, 2008) also found insignificant relationship between government rules and regulations, but (Nichter and Goldmark, 2009) reported as regulatory and institutional challenges deter MSE owners from making growth enabling investments, while special subsidies and trade protection offer greater benefits to larger firms, which are often more capable of lobbying.

In addition to this table 4.9 presents as the Gender of the owner/manager has insignificance negative relationship with average employment growth. Female owners/managers are more transformed in to medium level industry than male owners but insignificant. This is basically may be low number of female owners/managers as described by the descriptive statistics. However, (Chami and Papadaki, 2002) also reported that female entrepreneurs grew faster than male entrepreneurs, this finding is not surprising.

Owner's/managers experiences did not explain the transformation of micro and small enterprises. Even though, other researchers have found evidence that entrepreneurs whose work experience is outside the firm's industry are more successful at raising growth, (Solomon, 2004, and Chami and Papadaki, 2002) found no significance relationship between experience and growth of an enterprise. Having a completing senior education does not have a significant relationship with both average capital growth and average employment growth. Here also find insignificant relationship with employment growth and level of education. But (Chami and Papadaki, 2002) found a significant negative relationship between businesses whose owners did not finish high school and employment growth.

Age of the enterprise has a significant relationship with average employment growth with a significant level of 5 percent. The relationship of average capital growth with respect to age of the enterprise is negative over our sample space. Enterprise located near to infrastructure has a significant negative relationship with average capital growth at 5 percent and enterprises located in a suitable location have correlated positively and significantly with average employment growth at 10 percent significant level which is in support of the findings of (Chami and Papadaki, 2002) and (Mulu, 2007)

Conclusions- The descriptive statistics reveal that majority of the source of finance for their business is their own source. The Econometric result analysis reveal that finance access, management know-how in business, Market access for the enterprises, infrastructure, is a major determinant factor for the transformation of MSEs in Addis Ababa.

Recommendation - It is highly also recommendable for the government and policy makers to prepare management workshops and seminars that can be organized by chambers of commerce, non-government organizations (NGOs), universities, and other nonprofit organizations to train MSEs owners/managers about leadership, planning, organizing, communication skills, personal and financial management, basic accounting,

marketing strategies, and recordkeeping. Business owners should network and seek advice from experienced entrepreneurs in MSES.

The government and other concerned bodies should help micro and small enterprises in searching market for their products through different means both inside and outside the country.

It is recommended that government should take the necessary action to build and maintain infrastructures.

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Appendix

A**ppendix-A: The descriptive statistics of the variables entered in the econometric analysis and other variables.**

Variables	N	Minimum	Maximum	Mean	Std. Deviation
Beginning capital	74	500	700000	79164.86	123932.349
Current capital	74	500000	7141853	2919631.17	1741128.901
Begging employee	74	1	50	7.88	7.616
Current employee	74	8	142	37.03	28.079
Gender of the owner	74	0	1	.76	.432
Age of the owner	74	23	62	34.82	9.487
Level of education	74	0	1	.27	.447
Experience of the owner	74	3	25	10.05	5.325
Age of the enterprise	74	1	13	6.74	2.472
Finance access	74	1.00	4.00	2.5694	.91720
Management know-how	74	1.00	5.00	3.8147	.89807
Market access	74	1.00	5.00	3.1936	.95823
Poor infrastructure	74	1.50	5.00	4.0180	.89840
Technology	74	1.00	5.00	2.9850	.90874
Support MSEs get	74	1.33	4.00	2.8874	.62307
Accounting and record keeping	74	2.00	5.00	3.7568	.85885
Government rules and regulations	74	1.00	5.00	2.9482	.90531
Textile and garment	74	.00	1.00	.0541	.22767
Food processing	74	.00	1.00	.0676	.25272
Metal and wood works	74	.00	1.00	.4189	.49675
Others sectors	74	.00	1.00	.0405	.19857
Construction	74	.00	1.00	.4189	.49675
Inconvenient location	74	.00	1.00	.0811	.27482
Near to market	74	.00	1.00	.0811	.27482
Near to infrastructure	74	.00	1.00	.0676	.25272
Near to raw material	74	.00	1.00	.2027	.40476
Suitable location	74	.00	1.00	.5676	.49880
Average capital growth	74	.79	299.90	41.1029	66.83611
Average employment growth	74	.10	20.00	1.1032	2.43501
Valid N (list wise)	74				

Appendix B: Tests for OLS Assumptions under Multiple Regressions

1. Skewness/Kurtosis Tests for Normality

The result of normality test of the variables for the two model of this study after regression is as follows:

Model 1: Average Capital Growth

Reg ACG FIN MGMT MKT INF TEC SUP BAK GOV Exp Age $\sum dummy\ variables$

Skewness/Kurtosis tests for Normality
------- Joint ------

Variable	Pr (Skewness)	Pr (Kurtosis)	adj chi2 (2)	Prob>chi2
Residual	0.235	0.032	7.74	0.586 Model 2: Average Employment Growth

Reg AEG FIN MGMT MKT INF TEC SUP BAK GOV Exp Age $\sum dummy\ variables$

Skewness/Kurtosis tests for Normality
------- Joint ------

Variable	Pr (Skewness)	Pr (Kurtosis)	adj chi2 (2)	Prob>chi2
Residual	0.445	0.835	1.234	0.089

2. Heteroscedasticity or non-constant variance test - The White"s test indicates that the regression of the residuals on the predicted values reveals insignificant Heteroscedasticity. The Heteroscedasticity or non-constant variance test for the two models of this study is as follows:

Model 1: Average Capital Growth

Reg ACG FIN MGMT MKT INF TEC SUP BAK GOV Exp Age $\sum dummy\ variables$

White¨'s test for Heteroscedasticity
Ho: Constant variance
Variables: fitted values of   ACG
chi2 (2) = 5.99 chi2calc= 39.22

Model 2: Average Employment Growth

Reg ACG FIN MGMT MKT INF TEC SUP BAK GOV Exp Age $\sum dummy\ variables$

White¨'s test for Heteroscedasticity
Ho: Constant variance
Variables: fitted values of AEG
chi2 (2) = 5.99 chi2calc = 35.52

Appendix C: Correlations (Pearson) analysis- Average capital growth as a transformation proxy

	CG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	.377 .000	1.00 0																					
2	.276 .009	.061 .303	1.00 0																				
3	.329 .002	.345 .001	-.101 .195	1.00 0																			
4	-.152 .098	-.098 .202	.077 .257	-.123 .149	1.00 0																		
5	.403 .000	.684 .000	.045 .351	.473 .000	.012 .459	1.00 0																	
6	.025 .415	.546 .000	.026 .412	.344 .001	.179 .063	.639 .000	1.00 0																
7	.281 .008	.365 .001	.041 .365	.314 .003	.010 .468	.414 .000	.334 .002	1.00 0															
8	.004 .487	-.134 .127	.051 .333	.026 .412	.136 .123	-.112 .170	.083 .242	-.216 .033	1.00 0														
9	-.168 .077	-.106 .183	-.105 .188	.309 .004	.129 .137	.074 .266	-.032 .394	-.220 .030	-.009 .469	1.00 0													
10	.051 .334	-.120 .155	.139 .119	.106 .184	.081 .245	.042 .361	.168 .076	-.333 .002	.064 .294	.613 .000	1.00 0												
11	.194 .049	.227 .026	-.047 .345	.220 .030	.236 .022	.270 .010	.024 .419	.054 .325	-.249 .016	.030 .401	.232 .023	1.00 0											
12	-.221 .029	-.035 .383	-.078 .254	.042 .362	.170 .074	.024 .377	-.037 .430	.197 .046	-.213 .034	-.005 .484	.190 .052	.132 .131	1.00 0										
13	.090 .223	-.040 .367	-.263 .012	.070 .277	.005 .484	.004 .487	-.021 .430	-.025 .415	.047 .345	.131 .132	.269 .010	.136 .125	-.145 .108	1.00 0									
14	.158 .089	.186 .056	.217 .032	.275 .009	.046 .350	.064 .294	.136 .124	.203 .041	.085 .235	-.241 .019	.064 .294	.027 .409	.043 .359	.064 .293	1.00 0								
15	-.069 .280	.140 .117	.084 .238	.019 .435	.012 .459	.029 .402	.088 .228	.098 .204	.063 .298	.263 .012	.100 .198	.029 .402	.038 .373	.203 .041	.229 .025	1.00 0							
16	.084 .237	.022 .426	-.213 .034	.006 .479	.124 .147	.035 .385	.000 .498	-.062 .300	.177 .066	.040 .367	-.067 .286	.203 .042	.029 .403	.035 .385	.049 .339	-.055 .320	1.00 0						
17	.063 .296	-.225 .027	.180 .063	.091 .220	.012 .459	.050 .336	.148 .104	.073 .268	.217 .032	.164 .081	.035 .385	.038 .373	.203 .041	.229 .025	.721 .000	.175 .068	.175 .068	1.00 0					
18	-.119 .155	-.367 .001	-.040 .367	.156 .093	.179 .064	.233 .023	-.026 .413	.273 .009	.081 .245	.163 .082	.165 .079	-.178 .065	.069 .279	.071 .274	.117 .160	.340 .052	.152 .098	-.152 .098	1.00 0				
19	.081 .247	.032 .394	.034 .386	-.187 .055	.061 .301	.123 .148	.039 .370	-.139 .119	.065 .290	-.011 .464	.006 .479	.062 .299	.042 .361	.071 .274	.117 .160	.152 .098	.061 .303	.149 .102	-.088 .227	1.00 0			
20	-.098 .202	.157 .091	-.086 .233	.036 .381	.096 .208	.014 .451	.107 .182	.098 .204	-.044 .354	.024 .421	-.176 .067	-.098 .202	.043 .359	.064 .293	.072 .270	.099 .201	-.055 .320	.010 .465	-.080 .249	.080 .249	1.00 0		
21	.270 .010	.029 .402	-.048 .342	.045 .353	.040 .367	.221 .029	.150 .100	-.195 .048	.094 .213	-.001 .496	.051 .334	.080 .250	-.136 .124	.087 .229	.104 .190	.117 .161	-.150 .101	.150 .101	.136 .124			1.00 0	
22	.059 .309	-.081 .245	-.001 .496	.171 .073	.049 .340	-.009 .469	.062 .301	.057 .314	-.213 .034	.008 .474	.007 .478	-.141 .116	.101 .195	.018 .441	.078 .255	.041 .364	-.088 .228	.340 .002	.340 .002	-.308 .004	-.578 .000		1.00 0

N.B: CG= capital growth, 1=finance access, 2= management know-how, 3= market access, 4= poor infrastructure, 5= technology, 6= support MSE get, 7= accounting and record keeping, 8= government rules and regulation, 9= age of the enterprise, 10= experience of the owner, 11= gender of the owner, 12= level of education, 13= dummy textile, 14= dummy food processing, 15= dummy metal and wood works, 16= dummy other sector, 17= dummy construction, 18= dummy inconvenient location, 19= dummy near to market, 20= dummy near to infrastructure, 21= dummy near to raw material, 22= dummy suitable location.

Appendix-D: **Correlations (Pearson) analysis- Average employment growth as a transformation proxy**

	EG	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
1	.116 .163	1.00 0																					
2	.196 .047	.061 .303	1.00 0																				
3	.173 .070	.345 .001	-.101 .195	1.00 0																			
4	-.297 .005	-.098 .202	.077 .257	-.123 .149	1.000																		
5	.015 .451	.684 .000	.045 .351	.473 .000	.012 .459	1.000																	
6	-.086 .232	-.546 .000	.026 .412	.344 .001	.179 .063	.639 .000	1.00 0																
7	.240 .020	.365 .001	.041 .365	.314 .003	.010 .468	.414 .000	.334 .002	1.00 0															
8	-.058 .312	-.134 .127	.051 .333	.026 .412	.136 .123	-.112 .170	-.083 .242	.216 .033	1.00 0														
9	-.456 .000	-.106 .183	-.105 .188	-.129 .137	.309 .004	-.074 .266	.032 .394	-.220 .030	.009 .469	1.00 0													
10	-.227 .026	-.120 .155	.139 .119	-.106 .184	.081 .245	-.042 .361	-.168 .076	.333 .002	.064 .294	.613 .000	1.000												
11	-.039 .371	.227 .026	-.047 .345	.220 .030	-.236 .022	.270 .010	.024 .419	.054 .325	-.249 .016	.030 .401	.232 .023	1.00 0											
12	.041 .364	-.035 .383	.078 .254	-.042 .362	.170 .074	-.130 .134	.037 .377	.197 .046	-.213 .034	-.005 .484	-.190 .052	.132 .131	1.00 0										
13	-.040 .366	-.040 .367	-.263 .012	-.070 .277	-.005 .484	.004 .487	.021 .430	.025 .415	.047 .345	.131 .132	.269 .010	.136 .125	-.145 .108	1.000									
14	.384 .000	.186 .056	.217 .032	.275 .009	-.046 .350	.064 .294	.136 .124	.203 .041	.085 .235	-.241 .019	-.064 .294	.027 .409	-.043 .359	-.064 .293	1.00 0								
15	-.063 .297	.140 .117	-.084 .238	.019 .435	-.012 .459	.029 .402	.088 .228	.098 .204	.063 .298	.263 .012	.100 .198	-.029 .402	.038 .373	-.203 .041	.229 .025	1.00 0							
16	-.023 .422	.022 .426	-.213 .034	.006 .479	.124 .147	-.035 .385	.000 .498	.062 .300	.177 .066	.040 .367	-.067 .286	.029 .403	-.049 .339	.055 .320	.175 .068		1.00 0						
17	-.104 .188	-.225 .027	.180 .063	-.091 .220	-.012 .459	-.050 .336	-.148 .104	.165 .081	.073 .268	-.217 .032	-.164 .081	.035 .385	.038 .373	-.203 .041	.229 .025	.721 .000	.175 .068	1.000					
18	-.048 .343	-.367 .001	.040 .367	-.156 .093	.179 .064	-.233 .023	.026 .413	.273 .009	-.081 .245	.163 .082	.165 .079	-.178 .065	-.069 .279	-.071 .274	.117 .160	.049 .340	.190 .052	-.152 .098	1.000				
19	-.080 .248	.032 .394	.034 .386	-.187 .055	-.061 .301	-.123 .148	.039 .370	.065 .290	.139 .119	.011 .464	.006 .479	-.062 .299	.042 .361	-.071 .274	.117 .160	-.152 .098	.061 .303	.149 .102	-.088 .227	1.000			
20	.108 .180	.157 .091	.086 .233	-.036 .381	-.096 .208	.014 .451	.107 .204	.098 .204	-.044 .354	.024 .421	-.176 .067	-.098 .202	.043 .359	-.064 .293	-.072 .270	.099 .201	-.055 .320	-.010 .465	-.080 .249	-.080 .249	1.000		
21	-.131 .133	-.029 .402	.048 .342	.045 .353	.040 .367	.221 .029	-.098 .032	.150 .100	-.195 .048	.094 .213	.001 .496	.051 .334	-.080 .250	.177 .066	-.136 .124	-.087 .229	.104 .190	.117 .161	-.150 .101	-.150 .101	-.136 .124	1.000	
22	.122 .150	.081 .245	-.001 .496	.171 .073	-.049 .340	.009 .469	.062 .004	.057 .314	.213 .034	.008 .474	-.007 .478	.141 .116	-.033 .391	.018 .441	.078 .255	.041 .364	-.088 .228	-.340 .002	-.340 .002	-.308 .004	-.578 .000	1.000

N.B: EG= employment growth, 1=finance access, 2= management know-how, 3= market access, 4= poor infrastructure, 5= technology, 6= support MSE get, 7= accounting and record keeping, 8= government rules and regulation, 9= age of the enterprise, 10= experience of the owner, 11= gender of the owner, 12= level of education, 13= dummy textile, 14= dummy food processing, 15= dummy metal and wood works, 16= dummy other sector, 17= dummy construction, 18= dummy inconvenient location, 19= dummy near to market, 20= dummy near to infrastructure, 21= dummy near to raw material, 22= dummy suitable location.