# Determinant Factors of Micro and Small Enterprises Transformation in to Medium Level Industry: The Case of Addis Ababa City Administration

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## ABSTRACT

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Micro and small enterprises are the key for most developed and developing countries economy due to the fact in creating employment opportunity and supporting large manufacturing companies in the economy. The results of most research studies reveal that most micro and small enterprises in developing countries especially in Ethiopia have many problems for transformation and growth due to different factors. Thus, this research assess "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 in 10 sub cities. The objective of the study was to identify factors of micro and small enterprises transformation in to medium level industry in Addis Ababa city administration.

The study was an explanatory design more of quantitative in nature. Data were collected from 74 transformed micro and small enterprises using a pre designed person assisted questionnaire. The study were used micro and small enterprise transformation in to medium level industry measured by the enterprises employment growth and capital growth as dependent variable and finance access, management know-how, market access for their product, poor infrastructure, technology, the support micro and small enterprises get, adequate accounting and record keeping and government rules and regulations as an independent variables. The researcher were used both correlation analysis and regression analysis to show the relationship among the dependent variable and the independent variables and to test the hypothesis drawn.

The results provide evidence that the correlation coefficients of finance, management knowhow, 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.

18 19 Key words: MSE; Transformation; Determinant factor; Addis Ababa; Medium level industry; Enterprise

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## 1. INTRODUCTION

24 According to the central statistical authority survey, there are almost 570,000 Micro and Small 25 Enterprise (MSE) in Ethiopia, 99.4 percent of which are micro-enterprises with fewer than ten 26 employees, accounting for 88.2 percent of private sector employment. The micro enterprises are very 27 small. On average, they employ one and a half workers (this includes the owner and perhaps one 28 occasional helper), and earn an annual operating surplus of 1,300 birr. Sole proprietors operated 82 29 percent of urban enterprises. Of the total employment in these urban micro-enterprises, family members accounted for 60 percent. Beyond family members, apprentices constituted a large 30 31 proportion of the remaining MSE work force. The average micro-enterprise has a capital of 3,528 birr, 32 a yearly production value of 2,300 birr and an annual surplus of 1,300 birr. Although significantly more 33 productive and profitable than micro-enterprises, small-scale industries are also very small, with an 34 average of slightly more than three employees, 18,934 birr in annual operating surplus, capital of 35 38,554 birr, and production value of 68,800 birr[1]. 36

37 In Ethiopia, MSEs are the second largest employment generating sector next to agriculture. More 38 than 1.3 million people in the country are engaged in MSE sector [2]. But a large number of MSEs are unable to transform and remain to be continued existence which cannot provide employment. Also, 39 out of 1000 MSEs in this country around 69% of them are found survival types [3] and predominantly 40 in capital city Addis Ababa majority (75.6%) of the MSEs are unable to transform at all since start up 41 and only 21.9% of the MSEs were added workers [4]. Even though MSEs that add workers or 42 43 seeking to add labor force make a major contribution to the economic growth of the county and 44 helping more of these enterprises to transform can make a greater contribution to unemployment 45 reduction and income generation than equal efforts made for the promotion of new MSE. Besides, the 46 MSEs that add workers are very important mechanism for helping people to move up and out of 47 poverty since increase in size is often associated with an increase in economic productivity but, 48 greatest MSEs are question to dissimilar set of dynamic forces which can disturb their transformation 49 and decrease their possible role to the economic growth of the country. Hence, most MSEs remain 50 the alike in magnitude of employment since start up as compared to medium enterprises.

52 Most MSE face challenges to transform in to medium level industry. The major obstacles for the 53 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 54 55 and technology[5]. Salie [6] also identified problems that face the development of MSEs as: shortage 56 of finance, raw materials supply, and skilled manpower, lack of working place, marketing, credit 57 access, business advisory and counseling services, and information and technology, poor networking, continuous and sustainable training and counseling services, access to infrastructural 58 59 services and Problems of awareness, incentives, taxation and licensing. 60

61 In turn, the main contribution of this study is to identify the factors for MSE transformation in to 62 medium level. Because most enterprise can successfully transform while others are fail to transform, 63 identifying the problems facing MSE management in Ethiopian context may be importance to provide 64 assistances like finance, training, management, and technology. Second, scholars and practitioners 65 in Ethiopia should understand the level of MSE transformation, which plays a significant role in providing ancillary services to large corporations. 66 Third, the study draws management and 67 professional's attention to the urgent need for specific management practices to enhance 68 transformation, growth and expansion and sustainability of MSE in Ethiopia. Fourth, identifying the 69 factors that help micro and small businesses to transform in to medium industry may use other micro 70 and small enterprises to transform, expand and grow. Finally, from an academic perspective this 71 study's insights should contribute to the future development of this line of research, particularly in a 72 developing country like Ethiopia.

73 1.1. Objectives

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- 74 ✓ To describe the entrepreneurial and enterprise characteristics that determines transformation of 75 MSE in to medium level industry.
- ✓ To identify the possible determinant factors for the transformation of MSE in to medium level 76 77 industry. 78
  - To analyze the way in which dependent variables are related with independent variables.
- ✓ To identify the lessons learnt from the transformed MSE's and to give recommendations for the 79 successful implementation and transformation of MSE's. 80
- 1.2. **Characteristics of MSE in Ethiopia** 81

82 Like other developing countries, in Ethiopia MSE are informal sectors are the main source of employment and income for vast number of people [7]. Many authors argued that the largest private 83 84 sector constitutes the MSE and the medium industries and created the largest number of employment 85 in the country. The government of Ethiopia also gives greater emphasis for the development of MSE 86 in its strategy and policy formulation. In developing countries, the informal sector is a large source of 87 employment and income, particularly for the urban population. The informal employment, outside of agriculture, is defined as employment that comprises of both self-employment, in the informal 88 89 enterprises, and wage employment, in the informal jobs, without secure contracts, worker benefits, or social protection and represents nearly half or more of the total non-agricultural employment in all 90 91 regions of the developing world. In Ethiopia, about half of the urban workforce is engaged in the 92 informal sector and Addis Ababa nearly accounts for about 40% of the total operators in micro 93 enterprise activities [8]. 94

95 According to the CSA [9] small scale manufacturing survey, over 89% of the informal sector operators 96 are concentrated in manufacturing, trade, hotel and restaurant activities. Of the small scale 97 manufacturing industries 85% are engaged in the manufacture of food, fabricated metal furniture and 98 old traditional cloths. The survey also revealed that the number of people earning their livelihood from 99 the informal sector activities and small scale manufacturing industries is eight times larger than those 100 engaged in the medium and large scale industrial establishments. According to the FMSEDA [10], the 101 MSE sector is characterized by highly diversified activities which can create job opportunities for a 102 substantial segment of the population. This indicates that the sector is a quick remedy for 103 unemployment problem. To curb unemployment and facilitate the environment for new job seekers 104 and self-employment a direct intervention and support of the government is crucial. Hence, in order to channel the support facilities to this diversified sector, a definition is needed to categorize the 105 106 sector accordingly.

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109 The MSE sector in Ethiopia appears to be fraught with a number of constraints that stifle its rapid 110 growth and development as a means of overcoming poverty and unemployment. The main 111 constraints that face MSE include inadequate empirical research on MSEs, limited responses by 112 financial institutions to MSEs, lack of appropriate technology and related facilities, lack of strong 113 organizations for entrepreneurs, lack of co-ordination among Business Development Service (BDS) providers, lack of access to land and premises, and lack of market access and market 114 115 information[11]. The Ethiopian government also identifies major constraining factors of the sector 116 These include: inadequate marketing and production space; facilities, backward production 117 technology; lack of innovation; marketing problems; lack of information; poor input quality; absence of 118 intra and inter enterprises networks; and lack of financial capital[12]. Similarly Solomon [13] identified the major constraints faced by small enterprises includes demand problems, paucity of capital, 119 120 equipment and technology, human and material inputs, rules and regulations and institutional bottle 121 necks. 122

#### 2. MATERIALS AND METHODS 123

#### 2.1. Description of the study area

125 The scope of the study is geographically limited to the city of Addis Ababa, Ethiopia as a case study. 126 The location was chosen because it is a center of agglomeration of business activities as a primate 127 city due to paucity of other competitive growth centers within the country. Hence, many people from different parts of the nation migrate in search of employment opportunities or to start a business [14].
Addis Ababa, the capital city, is the most populated urban city in the country confronted by MSEs
sectors. Increasing population size due to natural growth and high rural-urban migration makes MSEs
more significant. The 2007 Census result has revealed that 2,738,248 people were living in the city,
of which 52.3% were women. The residents of Addis Ababa account 23% of all urban dwellers of the
country [15].

135 The study mainly focused on assessing the major determinants that affect the transformation of micro 136 and small business enterprise in to medium industry in Addis Ababa city administration. The researcher were proposed to deal this study by using dependent variables to measure the 137 transformation of micro and small business enterprise; independent variables related to micro and 138 139 small business operation; finance access, management know-how, market access, poor infrastructure, technology, support obtained from different bodies, accounting and record keeping and 140 government rules and regulations. The study was based on the newly update micro and small 141 142 business enterprises definition of FEMSEDA that includes:

- •micro enterprises in the formal and informal sector, with a paid up capital not exceeding birr
  100,000 and employed up to 5 employees for manufacturing sector and a capital of birr 50,000
  and employed 5 employees for service sector.
- •small enterprises are those business enterprises with a paid up capital of above birr 100,001 and not exceeding birr 1,500,000 and employing 6-30 for manufacturing sector and capital of birr 50,001-500,000 and employing 6-30 employees for service sector.

Currently, the government of Ethiopia recognizes the transformation of some of the MSE enterprises in to medium level industry. Based on the criteria's of the government of Ethiopia MSE that are a capital of over birr 1.5 million for manufacturing and over birr 500,000 for service sector are transformed in to medium level industry, are the scope of this study. Therefore, this study includes MSE that fulfilled the above criteria. All these enterprises are found in Addis Ababa city administration micro and small enterprise development agency (AAMSEDA).

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## Methods Of Data Collection

157 Two instruments were used to collect data: the demographic questionnaire (DQ) that used to measure the 158 owner manager characteristics, the MSE characteristics and the enterprise characteristics, and MSE 159 questionnaire (MSEQ). The DQ were developed to gather information about respondents' sex, age, 160 educational level, gender, and experience, owner's motivation to start the business, the year of establishment of the business, the type of business, ownership status of the business, the number of 161 162 employees in the business, the source and amount of initial capital and amount of the current capital. The 163 MSEQ were consists of 48 items 6 questions for each independent variables related to the common 164 operations that determine MSE to transform in to medium level industry, based on the questionnaire 165 prepared by Indarti and Landenberg [16] and adapted to the situation of MSEs in Ethiopia. The statements were phrased with a possible response continuum based on a Likert-style five-point scale (1 = 166 167 strongly disagree to 5 = strongly agree). Respondents were selected randomly from each of the strata's 168 and questionnaire is a person-assisted questionnaire. Since the researcher assists the respondent how 169 they fill the questionnaire. The questionnaire were first translated to Amharic language by the researcher 170 and then the Amharic guestionnaire were translated back to English by Mr. Fekadu, MSE development expert and the English questionnaire were again translated to Amharic language. Then the researcher 171 compares the two questionnaires to be more accurate in terms of language differences. Moreover, the 172 173 researcher distributes 10 sampled MSEs as pilot survey for accuracy and validity of the questionnaire. 174

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## 2.3. 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. These enterprises have over Birr 1,500,000 working capital for manufacturing sector and Birr 181 500,000 working capital for service sector. The sample of the study were selected using a survey 182 technique and consists of 74 transformed MSEs located in Addis Ababa city administration. Stratified 183 sampling techniques were used to select the enterprises. Since the size of population stratum, N<sub>h</sub>, is the 184 only available information and it differs in size, the number of units drawn is proportional to the size of 185 strata, that is  $n_h \alpha N_{h..}$  Enterprises covered by the survey were classified into 5 strata's that includes 186 construction, metal and wood works, food preparation, textile and garment and others in 10 sub cities. 187 The number of transformed MSE in each of the above sectors and in the ten sub cities were as follows

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189 Table 2: Transformed MSE in to medium level industry in 10 sub city in Addis Ababa

S. N	Sub city	Construction	Metal and wood works	Food preparation	Textile and Garment	Others	Total
1	Yeka	5	12	1	1	-	19
2	Bole	11	14	-	-	1	26
3	Gulelie	17	-	-	1	-	18
4	Arada	13	7	-	-	1	21
5	Nifas Silk	11	36	-	1	1	49
6	Kirkos	9	5	3	2	4	23
7	Kolfie	1	19	-	-	1	21
8	Lideta	2	13	-	-	-	15
9	Addis Ketema	4	3	4	2	7	20
10	Akaki	6	16	1	2	3	28
	Total	79	125	9	10	18	241
	Percent	33	52	4	4	7	100%

190 Source: AAMSEDB, 2011

#### 191 Sampling Techniques:

The numbers of enterprises to be questioned (sample size) were obtained, by determining from a total

population of 241. Using Yamane's formula[17], there was a sample selection of 74 SMEs, comprising 24 constructions MSEs, 38 metals and wood MSEs and 3 food preparation MSEs, 4 textile and garment and

195 5 others. The formula states:

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$$\frac{1}{1 + N(e) 2} = \frac{241}{1 + 241(0.1) 2} = 74$$

199 Where: n-Sample size, N-population, e-Margin of error of 0.1

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200 Table 3: Sample size determination

n =

Strata	Number	Proportion	Sample	Frequency
Construction	79	33	24	
Metal and wood works	125	52	38	
Food preparation	9	4	3	
Textile and Garment	10	4	4	
Others	18	7	5	
Total	241	100	74	

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## 202 **2.4. Method of data analysis**

In this study descriptive statistics were used as the first stage of data analysis to describe the ownermanager characteristics, the MSE characteristics and the MSEs business practices and to provide detail information about each relevant variable used (age, gender, number of employees, year of the business, source of capital, amount of capital the business currently have and the type of activity the business engage). At this stage, mean, standard deviation, maximum and minimum values of the required
 variables will be computed.

The study were used the Pearson Product Moment Correlation method to show the relationship between independent variables and MSE transformation in to medium level industry (here after transformation) as a dependent variable. The Pearson product moment correlation were used to measure the degree to which two variables are correlated or associated with each other when both of those variables are metric (i.e., either interval or ratio-scaled data)([18].

According to the FeMSEDA [19] a MSE that transform in to medium level industry should be measured based on employment opportunity and capital of the enterprise. Therefore, transformation was measured by the dependent variables of growth in capital of the enterprise and growth in the number of job opportunity created by the enterprise. It also uses a multiple regression analysis to show the simultaneous impact of the independent variables on the dependent variable.

220 Correlation analyses were used to examine relationship between the determinant factors and MSEs 221 Transformation, while multiple regression analysis were employed to look at relationship between 222 contextual variables and MSE transformation. According to Getie [20], multiple regression analysis were 223 done to examine the simultaneous effects of several independent variables on a dependent variable that 224 is interval scaled, in other word, multiple regression analysis aids in understanding how much of the 225 variance in the dependent variable is explained by a set of predictors. Before applying multiple regression 226 analysis, the validity and reliability of the research instrument were examined using the values of 227 Cronbach's alpha (0.82). The research were used the Kolmogorov-Smirnov test to determine the 228 normality of the data. The result of normality test of the variables for the two model of this study after 229 regression is as follows:

- 230 Model 1: Average Capital Growth
- 231 Reg ACG FIN MGMT MKT INF TEC SUP BAK GOV Exp Age 🔀 dummy variables

232									
233	Skewness/Kurtosis tests for Normality								
234	Joint								
235									
236	Variable	Pr (Skewness)	Pr (Kurtosis)	adj chi2 (2)	Prob>chi2				
237	Residual	0.235	0.032	7.74	0.586				
238									
239	Model 2: Average El	mployment Grow	<mark>rth</mark>						
240	Reg ACG FIN MGMT	MKT INF TEC SU	UP BAK GOV E	xp Age <mark>X dum</mark>	my vartables				
241									
242		Skew	/ness/Kurtosis te	ests for Normal	<mark>ity</mark>				
243			Join	<mark>ıt</mark>					
244									
245	Variable	Pr (Skewness)	Pr (Kurtosis)	adj chi2 (2)	Prob>chi2				
246	Residual	0.445	0.835	1.234	0.089				
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- The statistical analysis was included checks for multi-co linearity. The issue of multi-co linearity arises if the independent variables are highly correlated [21]. 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 [22].
- The Statistical Package for Social Sciences (SPSS) were used in the analysis of the data collected in this research as the researcher deemed it the most appropriate given its versatility and considering the nature of the data collected. The results of analysis were presented by using tables.

#### 255 2.4.1. Description of Variables and Research Hypotheses

- 256 The researcher was used growth in capital and growth in number of employees as a dependent variable 257 to measure transformation. 258 1. Growth in capital: It is determined as the average of current and initial capital. When expressed 259 in annual terms, average return can be referred to as "average annual growth rate 260 (AAGR)"(http://www.investopedia.com/terms/c/cagr.asp). 261 [(current capital-initial capital)/initial capital]/ firm age] 2. Employment growth: is the number of employees both permanent and temporarily employed 262 by the enterprise. It also includes the family members and the owner working in the enterprise. 263 The use of compound annual growth rates permits a much more precise assessment of the 264 timing of employment growth effects [23]. AEGR were used in the study. The average annual 265 266 growth in jobs since startup which is measured in number of jobs created by firm is calculated 267 as:
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[(Current employment -initial employment) /initial employment]/ firm age

The following independent variables and hypotheses were proposed to increase our understanding of the determinant factors for the transformation of MSE owners in Addis Ababa city administration. These factors were determined by detailed reviewing the literatures and adjusting for the problems faced by MSE to transform in to medium level industry in Addis Ababa.

#### 274 1. Finance Access

In Ethiopia, lack of finance is among the problems for starting, expanding, and transforming MSE. The
 government of Ethiopia gives different financing services for MSEs even though there are constraints on
 these services [24]. These includes saving services, loan services, equipment leasing, micro insurance
 services, Hawala services, managing third party money and others.

Empirical evidence suggests that retained earnings are the predominant source of financing among growing SMEs (GSMEs) [25]. However, more successful GSMEs use more external sources of financing, such as financial institutions, venture capitalists and individual investors, than do less successful MSE. Debt is by far the predominant source of external financing among small firms, even though there are barriers associated with debt financing for MSE.

284 Hypothesis 1: There is a significant relationship between finance access for MSE and MSE 285 transformation

#### 286 2. Management Know-how:

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288 Management know-how embodied in the entrepreneur may be an important factor in the transformation of 289 MSEs. Management know-how may be acquired form family or having previous business experiences. It 290 may include the skill of managing people, resources, finance and skills. Management know-how is the 291 ability of planning, staffing, organizing, directing and controlling for the achievement of MSEs objective. 292 Furthermore, management know-how may be acquired through education offered by different 293 universities, colleges or institutions. In Ethiopian context there are different institutions, universities that 294 offered management trainings for investors and owners. According to the FeMSEDA [26], the acquisition 295 of relevant vocational, technical and business skills is generally regarded as one of the critical factors for 296 success in small enterprises. In addition, literacy and entrepreneurial awareness are seen as particularly 297 important requirements to enable people to advance lower level activities into larger and better earning
 298 enterprises.

299 Hypothesis 2: There is a significant relationship between management know-how and MSE 300 transformation.

#### 301 3. Market Access:

302 Dynamic economic theories suggest that growth requires strategic flexibility and the ability to change 303 market focus, which may require introducing new products or entering new markets [27]. Small 304 enterprises usually regard market constraints and the inability to sell their products and services as one of 305 the most serious obstacles to the starting of businesses and growth beyond mere subsistence level. This 306 assertion also holds true in the case of Ethiopian MSEs, as revealed from various studies undertaken 307 concerning the MSE sector. Marketing is one of the supports given by the government of Ethiopia to MSE 308 to search market opportunities have local, regional and international market opportunities to expand 309 their market share.

310 Hypothesis 3: There is a significant relationship between market access for their product and MSE 311 transformation.

#### 312 4. Infrastructure:

313 Infrastructure is one of the basic factors required to enhance the pace of industrialization in any country. 314 The development of business and industrial premises (shops, offices, factories, market stands, etc.) and 315 infrastructure facilities, including the supply of electricity, water, telecommunication connections, sewage 316 systems, etc. are crucial infrastructural facilities and utilities which warrant the growth and expansion of 317 business enterprises. Pamella [28] also find that poor infrastructure, services such as electricity, telecommunications, transportation, and water and sanitation play a critical role in a country's 318 319 development and are directly and indirectly linked to small business success and economic growth. The 320 mentioned physical infrastructure elements are not adequately developed and expanded to meet the growing demand of business activities in Ethiopia. The main factor for such underdevelopment is due to 321 322 the obvious nature of infrastructural projects which entail huge investment cost outlays. Hence, most 323 enterprises particularly the small and micro enterprises are facing serious problems in this regard. 324

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Hypothesis 4: There is a significant relationship between poor infrastructure and MSE transformation.

#### Technology

According to Indarti and Langenberg [29] technology is among the determinant factors for the success of micro and small enterprise. Technology may play an important role in this respect. In this context, technology has a close relationship with improvement of production process. Previous study has revealed that lack of equipment and outdated technology are among hindrances of SME development. The study of Ruengde et.al [30] disclosed that technological change innovations had significant relationship with market growth. A study in Ireland unearthed that technological posture, automation, and process innovation were significantly linked to satisfaction on return on investment (ROI) [31].

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Hypothesis 5: There is a significant relationship between technology and MSE transformation.

#### 6. Support MSEs get

Small business is to be designated a priority sector for the government, in terms of policy formulation, direct support from its own resources and in the mobilization of external resources. The government helps ranges from self-help activities of groups of small enterprises and the abolishing of regulatory obstacles to the better cooperation between small and bigger enterprises with respect to sub-contracting and other forms of interlinkages and the granting of tax concessions by federal or regional government. It also includes support services in management and technical training, consulting, and technology support.
 Responsibility for education, training and experience transfer rests on a wide range of institutions,
 including the federal and regional governments, NGOs and the private sector. This also applies to the
 sphere of entrepreneurship sensitizing, training in skills relevant to micro and small enterprises in different
 sectors and industries, and the acquisition of management experience by small-business owners and
 staff.

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## Hypothesis 6: there is a significant relationship between the support MSE get and MSE transformation.

#### 7. Accounting and Record keeping:

357 Keeping track of information through rudimentary accounting practices (i.e. basic records of costs and 358 revenues) is crucial for business success. Successful SMCEs were much more likely to have regular accounting records than the unsuccessful SMCEs. Most business owners end up losing track of their 359 360 daily transactions and cannot account for their expenses and profits at the end of the month [32]. Good 361 recordkeeping provides MSEs with accurate information on which to base decisions, such as projecting 362 sales and purchases, determining break-even points, and making other financial analyses. The prevalent 363 lack of proper records has led to the closure of some businesses, thereby making it a significant issue for 364 business success.

- 366 Hypothesis 7: there is a significant relationship between adequate accounting and record keeping and 367 MSE transformation.
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#### 8. Government rules and regulations about MSE

Government is responsible for the formulation of rules and regulations that govern MSE. Governments should develop the laws and commercial codes that define property rights and the judicial institutions and processes that make them credible. Markets need a clear definition of property rights that can be enjoyed and transferred to other parties. Clear collateral laws and their implementation enable asset-based lending, another transactions-based lending technology whereby loans are based primarily on the value of specific borrower assets. The Ethiopian government, in this regard shall also establish a user-friendly environment for the simplification and standardization of documents.

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Hypothesis 8: There is a significant relationship between government rules and regulations towards MSE
 and MSE transformation.
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# 381 2.4.2. Control Variables382

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). These variables are expected to have an effect in one way or another on the transformation of MSE in to medium level industry. The study captures owner-managers' attributes using three indicators: gender, were measured as dummy one if a firm is owned by a male and zero if otherwise; dummy education of the owner (*EDU*) 1 if the owner completes senior education otherwise 0 and experience of the owner is expressed in terms of number of years.

To capture firm-level characteristics, the paper were utilized three variables: dummy location (Loc), were indicated as 1 for firms operating in medium location, near to the market, for near to raw material, near to infrastructure and zero for those operating elsewhere; age is a numeric variable and dummy industry (*Btype*) were indicated as one for firms in construction, metal and wood works, textile and garment, food preparation and zero for elsewhere.

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## 396 2.5. Model Specification

397 The following multiple linear regression model Gujarat [33] was used to estimate quantitatively the 398 transformation of MSE in to medium level industry in Addis Ababa city Administration. 399 Τί= β0 + Σβί Χί + εί Where: 400 Ti are the ith observation of dependent variables • 401 β0 is the constant or intercept term • 402 βi are the coefficients of the Xi variables • 403 Xi are the ith observation of the explanatory variables • 404 εi is the error term of the models • 405 Ti is MSE transformation, measured by employment growth and capital growth and when the above 406 general model is changed into the specified variables of this study, the regression equations were as 407 follows to estimate transformation of MSE in to medium level industry: 408 409  $TC(t')-(t)/\mu = \beta 0 + \beta 1 (FIN) + \beta 2 (MGMT) + \beta 3 (MKT) + \beta 4 (INF) + \beta 5 (TEC) + \beta 6 (SUP) + \beta 7 (BAK) + \beta 8$  $(GOV) + \beta 9 (Gen) + \beta 10 (Edu) + \beta 11 (Exp) + \beta 12 (Age) + \beta 13 (B typ) + \beta 14 (Loc) + \varepsilon$ 410 .....(1) 411 412 413  $EMP(t')-(t)/\mu = \beta 0 + \beta 1 (FIN) + \beta 2 (MGMT) + \beta 3 (MKT) + \beta 4 (INF) + \beta 5 (TEC) + \beta 6 (SUP) + \beta 7 (BAK) + \beta 7 ($ 414  $\beta 8$  (GOV) +  $\beta 9$  (Gen) +  $\beta 10$  (Edu) +  $\beta 11$  (Exp) + $\beta 12$  (Age) +  $\beta 13$  (Btyp) +  $\beta 14$  (Loc) +  $\epsilon$ 415 .....(2) 416 417 Where: 418 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, 419 GOV=Government rules and Regulations, Edu=Level of owner's education, Exp= experience of the 420 421 owner, Age= age of the owner, Btyp=Business type of the enterprise, Loc=Location of the business, 422 EMP=Employment growth, Gen=Gender of the owner,  $\varepsilon$  =the error term of the model. 423 424 425

# 426 3. RESULTS AND DISCUSSION 427

428 The questionnaire data were analyzed using SPSS. Simple descriptive statistics, correlation analysis and 429 linear regression formed the major part of guantitative data analysis. Firstly, descriptive statistics were 430 used to study the sample profile. The independent variables, control variables and two variables that used 431 to measure the transformation of MSEs in to medium level industry were analyzed. Pearson correlation 432 coefficients matrix was used to study the relationship between transformation indicator variables (average 433 capital growth and average employment growth) and the independent variables and control variables of 434 the study. Econometric analysis was then performed to see the relationship between transformation 435 indicator variables (average growth in capital and average growth in employment) and the factors for 436 MSEs transformation.

## 437 4.1 **Results of Descriptive Statistics**

#### 438 4.1.1 Characteristics of Business

According to the survey, 24.3% (18) of the respondents surveyed are female and 75.7% (56) of the MSE operators are males. This figure signifies that most of the respondents are men & this implies that men own most of the transformed MSEs in Addis Ababa City Administration. This is in support of Solomon [34], Rahael [35], Mulu [36] and Endalkachew [37].

From the data obtained, it can be observed that 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.

#### 446 Table: 4.1 Age of the owners/managers

	¥	
Owner's age	Number	Percent
18-34	38	51.4
35-45	24	32.4
45-60	11	14.9
above 60 years	1	1.4
Total	74	100

447 Source: the survey result, 2011

The above figure clearly indicates that most of the transformed MSE owners/managers surveyed are young and productive people. This implies that MSEs are important sectors for generating employment

450 opportunities for young citizens.

451 According to our survey the educational levels of the MSE operators are: (1.4%)illiterate where as

452 According to our survey the educational levels of the MSL operators are, (1.4%)interate where as 453 (12.2%) elementary school, (16.2%) junior school, (39.2%) senior secondary school, (31.1%) university

454 level.

#### 455 **Table 4.2: Level of education for owners/managers**

Level of education	Number	Percent
Illiterate	1	1.4
Elementary school	9	12.2
Junior school	12	16.2
Senior secondary school	29	39.2
University level	23	31.1
Total	74	100

#### 456 Source: survey result, 2011

The above figure clearly shows that MSEs offer greater opportunities of creating employment not only for educated people but also for the illiterate and low skilled labor force.

459

According to the survey, the mean experiences of the owners/managers are 10.5 years with range of 22 years. This figure clearly indicates that most of the transformed MSE owners/managers surveyed have enough experience in their business. 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.

465

#### 466 **4.1.2 Characteristics of the Enterprises**

467 468 As the survey clearly indicates the establishment of the transformed MSEs were: before the year 1994 469 E.C. (13.5%), from the year 1994-2000 E.C (50%), and from the year 2000 E.C (36.5%). This data clearly 470 indicates that most of the transformed MSEs were established during the year 1997 E.C., which implies 471 that the free market economic policy, create conducive atmosphere for the establishment & growth of 472 MSEs. This is also a time that micro and small enterprise development agency established by the ministry 473 of trade and industry to run the development and support of MSEs and preparing policies and strategies

- 474 concerning to MSEs.
- As table 4.3 clearly indicates the industry sectors were: construction (33%), textile and garment (4%),
- food processing (4%), metal and wood works (52%) and others (7%). The above data clearly indicates

that most of the transformed MSEs (60%) were engaged in construction and metal and wood works.

#### 478 Table 4.3: Business sector

Sector	Frequency	Percent
Construction	24	33
Metal and wood works	38	52
Food preparation	3	4
Textile and Garment	4	4
Others	5	7
Total	74	100

479 Source: the survey data, 2011

480 According to table 4.4 the transformed MSEs enterprises are located near to the market (20%), near to

raw material (30%), near to infrastructure (30%), suitable locations (23%), inconvenient locations (10%).
 This clearly shows that 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.

Location	Frequency	Percent
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

# 485 **Table 4.4: Location of the enterprise**

#### 486 Source: the survey data, 2011

In order to assess as to who establish the enterprise (91.9%) of the respondents responded that the enterprise was established by themselves while (8.1%) of the respondents replied that the enterprise were established by others & this shows that most of the MSEs are established by the owners themselves.

As indicated in table 4.5, the 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 [38] and Endalkachew [39].

#### 495 Table 4.5: Form of Ownership of the Enterprise

Form of ownership	Frequency	Percent
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

498 Business owners/operators were asked the factors behind their motive to start their businesses. The 499 evidence as reported in table 4.6 shows that the most important motive to start a business is the 500 entrepreneur's desire to become independent. The majority of them (39.2%) respond that to realize a 501 dream, (33.1) responded that they wanted to be their own boss, to realize a better financial position (13.6%), followed by to enjoy a better quality of life (10.8%), while 4.5% of them reported that they could 502 not find suitable waged employment to become business operators. Similar findings are reported by 503 504 Solomon [40] and Endalkachew [41]. The findings indicate that the motivation for business start-ups as reported by entrepreneurs themselves is to become independent and autonomous and to realize their 505 506 dream.

507

#### 508 Table 4.6: Motivating Factors for Starting a Business

Motivations for starting a business	Frequency	Percent
To be your own boss	23	33.1
You could not find suitable waged employment	4	5.4
To realize a dream	29	39.2
To realize a better financial position	8	10.8
To enjoy a better quality of life	10	13.6
Total	74	100

509 Source: The survey data, 2011

<sup>496</sup> 497

Source: The survey data, 2011

#### 510 511 Source of Startup Capital

512

513 As table 4.7 clearly shows the source of initial capital for the MSE operators were: 6.8 percent gift from 514 relative and friends, 4.1 percent support from government and NGOs, 12.2 percent credit from formal 515 borrowing, 1.4 percent credit from equb, 63.5 percent from their own savings, 8.1 percent credit from informal borrowing and 2.7 percent selling personal properties. This implies that MSE operators have less 516 access of credit from banks and micro finance institutions. The table also shows that the majority of initial 517 518 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 519 from formal and non-formal financial markets is relatively rare. Banks do not normally practice risk lending 520 521 to new investors of small enterprises, which do not have a record of accomplishment .Thus, many micro and small enterprises begin with very small amounts of capital from personal savings and household 522 523 assistance, from relatives or friends, and steadily build up their enterprise by reinvesting profits. The mean starting capital of the enterprises was Birr 79,164.86 with a range of Birr 650,000 and the mean 524 current capital of the transformed MSEs has Birr 2,919,631.17 with a range of Birr 6.641,853. 525

526

Largest Sources of finance at start up	Frequency	Percent
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
rear The august date 2011		

#### 527 Table 4.7: Sources of finance at Start up

528 Source: The survey data, 2011

529

- 530 The descriptive statistics of the variables entered in the econometric analysis
- 531 and other variables.

#### 532

<b>Variables</b>	N	<b>Minimum</b>	<b>Maximum</b>	Mean	Std. Deviation
Beginning capital	<mark>74</mark>	<mark>500</mark>	<mark>700000</mark>	<mark>79164.86</mark>	<mark>123932.349</mark>
Current capital	<mark>74</mark>	<mark>500000</mark>	<mark>7141853</mark>	<mark>2919631.17</mark>	<mark>1741128.901</mark>
Begging employee	<mark>74</mark>	<mark>1</mark>	<mark>50</mark>	<mark>7.88</mark>	<mark>7.616</mark>
Current employee	<mark>74</mark>	<mark>8</mark>	<mark>142</mark>	<mark>37.03</mark>	<mark>28.079</mark>
Gender of the owner	<mark>74</mark>	<mark>0</mark>	<mark>1</mark>	<mark>.76</mark>	<mark>.432</mark>
Age of the owner	<mark>74</mark>	<mark>23</mark>	<mark>62</mark>	<mark>34.82</mark>	<mark>9.487</mark>
Level of education	<mark>74</mark>	<mark>0</mark>	<mark>1</mark>	<mark>.27</mark>	<mark>.447</mark>
Experience of the owner	<mark>74</mark>	<mark>3</mark>	<mark>25</mark>	<mark>10.05</mark>	<mark>5.325</mark>
Age of the enterprise	<mark>74</mark>	<mark>1</mark>	<mark>13</mark>	<mark>6.74</mark>	<mark>2.472</mark>
Finance access	<mark>74</mark>	<mark>1.00</mark>	<mark>4.00</mark>	<mark>2.5694</mark>	<mark>.91720</mark>
Management know-how	<mark>74</mark>	<mark>1.00</mark>	<mark>5.00</mark>	<mark>3.8147</mark>	<mark>.89807</mark>
Market access	<mark>74</mark>	<mark>1.00</mark>	<mark>5.00</mark>	<mark>3.1936</mark>	<mark>.95823</mark>
Poor infrastructure	<mark>74</mark>	<mark>1.50</mark>	<mark>5.00</mark>	<mark>4.0180</mark>	<mark>.89840</mark>
Technology	<mark>74</mark>	<mark>1.00</mark>	<mark>5.00</mark>	<mark>2.9850</mark>	<mark>.90874</mark>
Support MSEs get	<mark>74</mark>	<mark>1.33</mark>	<mark>4.00</mark>	<mark>2.8874</mark>	<mark>.62307</mark>

Accounting and record keeping	<mark>74</mark>	<mark>2.00</mark>	<mark>5.00</mark>	<mark>3.7568</mark>	<mark>.85885</mark>
Government rules and regulations	<mark>74</mark>	<mark>1.00</mark>	<mark>5.00</mark>	<mark>2.9482</mark>	<mark>.90531</mark>
Textile and garment	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.0541</mark>	<mark>.22767</mark>
Food processing	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.0676</mark>	<mark>.25272</mark>
Metal and wood works	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.4189</mark>	<mark>.49675</mark>
Others sectors	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.0405</mark>	<mark>.19857</mark>
Construction	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.4189</mark>	<mark>.49675</mark>
Inconvenient location	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.0811</mark>	<mark>.27482</mark>
Near to market	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.0811</mark>	<mark>.27482</mark>
Near to infrastructure	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.0676</mark>	<mark>.25272</mark>
Near to raw material	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.2027</mark>	<mark>.40476</mark>
Suitable location	<mark>74</mark>	<mark>.00</mark>	<mark>1.00</mark>	<mark>.5676</mark>	<mark>.49880</mark>
Average capital growth	<mark>74</mark>	<mark>.79</mark>	<mark>299.90</mark>	<mark>41.1029</mark>	<mark>66.83611</mark>
Average employment growth	<mark>74</mark>	<mark>.10</mark>	<mark>20.00</mark>	<mark>1.1032</mark>	<mark>2.43501</mark>
Valid N (list wise)	<mark>74</mark>				

533

The mean value of average capital growth is about 41 percent and the standard deviation is 66.8 percent. The minimum value of average capital growth is 0.79 percent while the maximum value is 299 percent. The transformation of micro and small enterprises, on average, is 1.1 percent as measured by average employment growth. It deviates by 2.43 percent from the mean value. The minimum value of average employment growth is 0.1 percent while the maximum value is 20 percent. On the bases of standard deviation from the mean, average capital growth highly deviated than average employment growth.

540

The average value of finance access for the sampled micro and small enterprises is 2.6. The standard deviation indicates that 0.92 variations of finance access from the average mean value of 2.6 among the sampled micro and small enterprises with minimum and maximum values of 1 and 4 respectively.

Likewise, the mean value for management know-how is 3.81 and the standard deviation of 0.9 from the mean value of 3.81, indicates that a wide variation of management know-how among the transformed micro and small enterprises. This variation can also be evidenced by the minimum and the maximum values of management know-how, which are 1 and 5 respectively.

548

The average value of market access for their product is 3.2, with a standard deviation from the mean value of 0.92. The standard deviation of market access indicates a wide variation of market access among the transformed micro and small enterprises. The minimum and maximum values of market access for their product are 1 and 5 respectively, which can be evidence for the wide variations of market access.

The average value of poor infrastructure is 4.0, with a standard deviation from the mean value of 0.89. The standard deviation of poor infrastructure indicates a wide variation of poor infrastructure among the transformed micro and small enterprises. The minimum and maximum values of poor infrastructure are 1.5 and 5 respectively, which can be evidence for the wide variations of poor infrastructure.

560 Technology for transformed micro and small enterprises has a mean value of 2.99. The standard 561 deviation of technology indicates that technology varies from the mean by 0.91 among the sampled micro 562 and small enterprises. The minimum and maximum values of technology are 1 and 5 respectively.

563

The average value of the support micro and small enterprises get from different bodies is 2.89, with a standard deviation from the mean value of 0.62. The standard deviation of support micro and small enterprises get indicates a wide variation of support among the transformed micro and small enterprises. The minimum and maximum values of the support micro and small enterprises get are 1.33 and 4 respectively, which can be evidence for the wide variations of support. 570 The average value of accounting and record keeping is 3.76, with a standard deviation from the mean 571 value of 0.86. The standard deviation of accounting and record keeping for micro and small enterprises 572 indicates a wide variation of accounting and record keeping among the transformed micro and small 573 enterprises. The minimum and maximum values of accounting and record keeping for the transformed 574 micro and small enterprises are 2 and 5 respectively, which can be evidence for the wide variations of 575 accounting and record keeping.

576

577 The last independent variable is the government rules and regulations, has a mean value of 2.95. The 578 standard deviation of board ownership from the mean is 0.91, which has 1 and 5 minimum and maximum 579 values respectively.

580

581 Growth performance in terms of capital varied across industry sectors of construction, food processing, 582 textile and garment, metal and wood works, and others. Most the transformed MSEs grew on a range of 583 10 to 20 percent and 0.79 to 30 percent in terms of average capital growth rates and average 584 employment growth rates respectively. The enterprises grew a mean of 1.103 percent and 41.1029 percent in average capital and average employment respectively. MSEs in the metal and woods work 585 586 sector grew faster in terms of employment growth and average capital growth than other sectors. MSEs in 587 the food processing sector grew slowly than other sectors both in terms of average capital growth and 588 average employment growth. This growth indicates that MSEs are generating high amount of 589 employment annually in addition to creating capital.

Table 4.8 Gr	owth measu	ures of enter	prises					
Growth	Type of the enterprise						Mini	Mean
measure of			um	mum				
the enterprise	Construct ion	Textile and Garment	Food processin g	Metal and wood works	Other			
ACG	37.0334	31.2946	18.9032	52.7484	12.8964	299.90	0.79	41.1029
AEG	0.7242	0.5996	0.26406	1.5277	1.3108	20.00	0.10	1.1032

# 590

#### 591 Source: Survey result, 2011

592

### 593

#### 594 4.2.1 Correlation analysis-Average capital growth rate as a MSE transformation proxy

595

596 In table 4.9, using the Pearson correlation, independent variables; finance access is significant at 1 597 percent level of confidence, management know-how is significant at 1 percent level of confidence, market 598 access is significance at 1 percent level of confidence, poor infrastructure is significant at 10 percent level 599 of confidence, technology is significant at 1 percent level of significance and accounting and recordkeeping are significantly correlated at 1 percent level with average capital growth respectively. 600 601 Except poor infrastructure the other variables are correlated positively. However, support MSE get and 602 government rules and regulations are correlated insignificantly.

603

#### 604 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

#### 605 Source: the survey result, 2011

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.

612

613 Furthermore, as it can be seen in table 4.9, the control variables; age of the enterprise, gender of the 614 owner/manager, level of education, industry type with food processing, and location near to raw material are correlated at 10 percent, 5 percent, 5 percent, 10 percent and 1 percent level of significance. Level of 615 education and age of the enterprise are negatively correlated at 10 percent and 5 percent level of 616 617 significance with average capital growth. As it is observed on the coefficients values, gender and location 618 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 619 620 food processing are correlated insignificantly. As predicted by the Jovanovich model of firm growth, 621 among this sample of surviving enterprises, younger firms grow faster. The relationship of average capital 622 growth with respect to age of the enterprise is negative over our sample space. The negative sign of the 623 coefficient for age of the enterprise is statistically significant at 10 percent significant level, indicating that 624 in the case of our sample, growth decreases at an increasing rate with the age of the firm.

625

#### 626 **4.2.2 Correlation analysis-Average employment growth rate as a MSE transformation proxy**

627

Below, Table 4.10 shows, the correlation matrix that predicts the likely relationship of average employment growth with finance access, management know-how, market access, infrastructure, technology, support, accounting and recordkeeping, and government rules and regulations as independent variables and owner-managers' attributes (gender, owner's level of education and experience of the owner) and a firm's characteristics (age of the enterprise, business type and location) as control variables of the study. This table also shows the linear relationships between each independent variables and control variables used in this study.

- 635
- 636

637 Table 4.10: Correlations (Pearson) analysis- Average employment growth as a transformation 638 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

639 Source: the survey result, 2011

In table 4.10, using the Pearson correlation, independent variables; management know-how is insignificant 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.
- 652

653 Furthermore, as it can be seen in table 4.10, the control variables; experience the owner/manager and 654 age of the enterprise are negatively correlated with average employment growth and industry type of food 655 processing are positively correlated at 5 percent level of significant, age of the enterprise is correlated at 656 1 percent level of significant. As it is observed on the table coefficients values of experience of the 657 owner/manager, age of the enterprise and food processing industry are correlated at -22.7 percent, -45.6 658 percent and 38.4 percent with average employment growth. But gender of the owner/manager, levels of 659 education, and other type of the business and location of the enterprise are correlated insignificantly. 660 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 661 662 negative over our sample space. The negative sign of the coefficient for age of the enterprise is 663 statistically significant at 10 percent significant level, indicating that in the case of our sample, growth 664 decreases at an increasing rate with the age of the firm. 665

#### 666 **4.3. Econometrics analysis: The impact of determinant factors on the transformation of micro and** 667 **small enterprises**

668 669

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. The regression table summery is summarized including Coefficients, Standard Errors, t-values and p-values for each of the two models and the ANOVA table is also summarized including number of observations, F-statistics, R-squared and Adjusted R-squared for each models.

675 676

#### 677 **Table 4.11: Summary of regression analysis for the study variables**

	Capital growth			Employment growth				
Variables	Coef	Std.Err	Т	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

					1				
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

678

#### 679 Source: survey result, 201

680 As it is summarized in table 4.11 above, the explanatory power of the variables used in the two models, from the R-squared values are equal to 53.8 percent and 46.9 percent for average capital growth and 681 average employment growth respectively. This implies that 53.4 percent of the changes in average capital 682 683 growth and 46.9 percent of the changes in average employment growth are successfully explained by the 684 variables used in the two models of this study. However, the remaining 46.2 percent of the changes in average capital growth and 53.1 percent of the changes in average employment growth are caused by 685 other factors that are not included in the models of this study. These results indicate the overall 686 goodness-of-fit of the models used in this study. Goodness-of-fit ( $R^2$ ) for the model (0.538) and (0.469) is 687 688 better than the one reported by Chami and Papadaki (0.181), Evans (0.1438), and Solomon (0.258) and 689 Mulu (0.12).

690

The adjusted R square for the two models is 0.363 and 0.268 for average capital growth and for average employment growth. This means that if we take model size into account, 36.3 percent of the variation in average capital growth and 26.8 percent of the variation in average employment growth were explained by the values of the independent variables.

695 696 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 these models are well fitted 697 at 1 percent level of significance. Here, one can infer from the results of R-squared and F-statistics that 698 the implemented models of this research are well fitted that the mentioned factors have a significant effect 699 on the transformation. Therefore, the following part of the analysis enables the researcher to identify the 700 701 possible determinant factors of MSE transformation that affect MSEs growth and to analyze the way 702 (direction of relationship) in which dependent variables are related with independent variables. 703

Table 4.11, indicates that finance access has a coefficient estimates of 0.452, and 0.098 with average capital growth and average employment growth. It is statistically significant at 1 percent level of significance for average capital growth and statistically insignificant for average employment growth. The 707 coefficients of finance access imply that MSEs transformation is positively related with the increase in 708 finance access. In other words, the higher the amount of financial access, the higher the transformation 709 achievement is and vice versa. Since the (P-values) of finance access are statistically significance at 1 710 percent level of significance for average capital growth and statistically insignificant for average 711 employment growth, the null hypothesis is rejected and the alternate hypothesis is accepted, which says 712 there is a significant relationship between finance access and MSEs transformation in to medium level 713 industry. Therefore, the outcome of this variable is in line with the proposed alternative hypothesis. Thus, 714 there is a significant positive relationship between finance access and MSEs transformation. This 715 outcome has the support of [42] and Pamela et.al [43]also reported a significant negative relationship 716 between lack of finance and micro and small enterprise performance.

There is no significant relationship between management know-how and MSEs transformation's in to medium level industry. Since the (P-values) of management know-how are significant at 5 percent level of significant for average capital growth and insignificance for average employment growth respectively, the null hypothesis is rejected and the alternate hypothesis is accepted. Therefore, the outcome of this variable is in line with the proposed alternative hypothesis. Thus, there is a significant positive relationship between management know-how of owners/managers and MSEs transformation in to medium level industry. This is consistent with the findings of solomon [44], Pamela et.al [45] and Mulu [46].

724 Market access has coefficient estimates of 0.206, and 0.072. It is statistically significant at 10 percent 725 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 726 727 increase in market access. In other words, the higher the amount of market, the higher the transformation 728 achievement is and vice versa. Hence, there is no significant relationship between market access and 729 MSE transformation. Since the P-values of market access is statistically significance at 10 percent level of 730 significance for average capital growth and insignificance average employment growth, the null 731 hypothesis is rejected and the alternate hypothesis is accepted, which says there is a significant relationship between market access and MSEs transformation in to medium level industry. Therefore, the 732 733 outcome of this variable is in line with the proposed alternative hypothesis. This outcome has the support 734 of (Chami and Papadaki [47], Solomon [48].

735 The relationship between poor infrastructure and the two transformation measures is statistically 736 insignificant for average capital growth and significant for average employment growth at 10 percent 737 significant level. Poor infrastructure has negatively related with MSEs transformation significantly. The implication of this result is that, there is a significant relationship between the transformation in to medium 738 739 level industry and poor infrastructure for MSEs. With regard to poor infrastructure, services such as 740 electricity, telecommunications, transportation, and water and sanitation play a critical role in a country's 741 development and are directly and indirectly linked to MSEs transformation's and economic growth poor 742 infrastructure directly affects MSEs. Power failures affect the production of goods and services and 743 inaccessible roads affect their distribution and increase transportation costs. For example, businesses 744 may find it problematic to operate in rural areas that are not accessible despite high demand for their 745 products. This limits their ability to expand and the opportunity to generate profit as reported by (Pamela et.al [49]. This finding consistent with the findings of Pamela et.al [50] and Solomon [51], which reported 746 747 a significant negative relationship with poor infrastructure and micro and small enterprise performance.

748 Technology has a coefficient estimates of 0.065, and 0.097, it is statistically insignificant for both average 749 capital growth and average employment growth. The coefficients of technology imply that MSEs transformation is not related with the increase in technology access. There is no significant relationship 750 751 between technology access and MSE transformation. Since the (P-values) of technology access are statistically insignificance for both average capital growth and statistically insignificant for average 752 employment growth, the null hypothesis is accepted and the alternate hypothesis is rejected, which says 753 there is no a significant relationship between technology and MSEs transformation in to medium level 754 Even though, most findings Langenberg and Indarti [52] reported insignificant relationship 755 industry. 756 between technology and enterprise growth, a further investigation is needed in this regard.

The support MSE get has coefficient estimates of-0.369 and -0.234; it is statistically significant at 5 percent level of significance for average capital growth and statistically insignificant for average 759 employment growth. The coefficients of support imply that MSEs transformation is positively related with 760 the increase in support MSEs get. In other words, the higher the amount of support MSEs get, the higher 761 the transformation achievement is and vice versa. Since the P-values of support MSEs get are 762 statistically significance at 5 percent level of significance for average capital growth and statistically 763 insignificant for average employment growth there is insignificant positive relationship between the 764 support MSEs get and MSEs transformation. Even though, Langenberg and Indarti [53] reported a 765 negative insignificant relationship between support and MSEs growth, this finding is consistent with most 766 findings [54].

767 The relationship between accounting and recordkeeping and the two transformation measures is 768 statistically significant for average capital growth at 5 percent level and statistically insignificant for 769 average employment growth. Accounting and recordkeeping has positively and significantly related with 770 average employment growth. The implication of this result is that, there is a significant relationship 771 between the transformation in to medium level industry and accounting and recordkeeping for MSEs. 772 Since the (P-values) of accounting and recordkeeping are statistically significance for average capital growth and statistically insignificant for average employment growth at 5 percent, there is a significant 773 774 relationship between accounting and recordkeeping and MSEs transformation in to medium level 775 industry. Therefore, the outcome of this variable is in line with the proposed alternative hypothesis. Thus, there is a significant relationship between accounting and recordkeeping and MSEs transformation. This 776 777 result is no surprising as all the transformed MSEs required having accounting and other records by the agency. Therefore, having recordkeeping and accounting records is a factor for their transformation in to 778 779 medium level industry. This is in support of Mwangi [55].

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781 The relationship between government rules and regulations and the two transformation measures is not 782 statistically significant. This means that government rules and regulations have no predicative capability 783 in the presence of other independent variables. Since the (P-values) of government rules and regulations 784 are insignificant for all the two transformation indicators, the alternative hypothesis is rejected. Therefore, 785 the outcome of this variable is not in line with the proposed alternate hypothesis. Thus, there is no significant relationship between government rules and regulations and MSEs transformations. Even 786 787 though, Langenberg and Indarti [56] finds insignificant relationship between government rules and 788 regulations, Nichter and Goldmark [57] reported as regulatory and institutional challenges deter MSE 789 owners from making growth-enabling investments, while special subsidies and trade protection offer 790 greater benefits to larger firms, which are often more capable of lobbying. Smaller firms more frequently report government policies to be unpredictable, and this uncertainty may be yet another factor that 791 792 reduces growth-enabling investments. Here, most of the MSE operators responded that they didn't face 793 this problem, government rules and regulations is one of the obstacles for MSEs. But this finding is not 794 consistent with most findings and further investigation is needed.

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In addition to what has been discussed above, table 4.11 presents the result of the regression analysis
 between control variables and transformation indicators, which are interpreted as follows:

798

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. This is
basically because of low number of female owners/managers as described by the descriptive statistics.
Chami and Papadaki [58] as the same time reported that female entrepreneurs grew faster than male
entrepreneurs, this finding is not surprising.

804

805 Owner's/managers experiences did not explain the transformation of micro and small enterprises. Even 806 though, other researchers have found evidence that entrepreneurs whose work experience is outside the 807 firm's industry are more successful at raising growth, Solomon [59] and Chami and Papadaki [60] found 808 no significance relationship between experience and growth of an enterprise.

Having had 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

811 growth and level of education. But Chami and Papadaki [61] found a significant negative relationship 812 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. 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 5 percent significant level, indicating that in the case of our sample, growth decreases at an increasing rate with the age of the firm.

From the industry sector food processing variables are statistically significant with a level of 10 percent with average employment growth at a coefficient of 0.241. But other sectors are insignificant relationship with both average capital growth and average employment growth. Even though, Chami and Papadaki [62] reported none of the industry hasn't relationship with employment growth. Mulu [63] also reported that the growth of firms is affected by the sector in which the business operates.

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. This is in support of the findings of Chami and Papadaki [64] and Mulu [65] also find that location of an enterprise in terms of city has a significant impact on the growth of enterprises but location of the enterprise have no significance impact on firm growth.

830 In addition to the quantitative analysis, respondents are asked to rank the determinant factors that help 831 them transform to medium level industry. Based on the finding, 50% of the respondent rank finance 832 access first, 24% of the respondent government rules and regulations and 12% of the respondents as 833 market access first. The overall all rank of the factors after weighting the rank were finance access ranked 834 first, market access ranked second, management know how ranked third, government rules and 835 regulations ranked four, infrastructure ranked fifth, technology ranked sixth, support MSEs get ranked 836 seventh and accounting bookkeeping and recordkeeping ranked last. This is consistent with the above 837 findings except accounting, bookkeeping and recordkeeping ranked last.

In general, in this study both correlation coefficient results of all the independent and control variables do not have the same sign for both the two transformation indicators and in the regression results the significant and the way of relationship of all independent and control variables do not have the same result for both the two transformation indicators. This is because transformations indicators are not equally indicate the transformations of MSEs in to medium level industry, because transformation in to indicators used different values with their limitations to indicate the ability of MSEs transformation in to medium level industry.

#### 845 4. CONCLUSION AND RECOMMENDATION

#### 846 **4.1 conclusions**

847 This exploratory study assessed the determinant factors for micro and small enterprise 848 transformation in to medium level industry in Addis Ababa city administration to make relevant 849 recommendations about how other enterprises can successfully transform from micro and small 850 scale enterprise to medium level industry. The discussion centered on the most important findings regarding the impact on MSEs transformation's in Addis Ababa. These include finance access, 851 management know-how, market access, poor infrastructure, technology access, and support for 852 853 MSEs, accounting and recordkeeping and government rules and regulations. There are also dependent variables of average employment growth and average capital growth to measure the 854 transformation of MSEs. 855

The survey method involved 74 transformed micro and small enterprises for better understanding the determinant factors for micro and small enterprise transformation in to medium level industry 858 in Addis Ababa city. The sample frame was taken from formally registered transformed MSEs in 859 Addis Ababa micro and small enterprise development bureau. Among the transformed 860 enterprises, five types of business activities were selected based on the Addis Ababa MSE 861 development bureau classification. These were construction, textile and garment, food 862 processing, metal and wood works and other enterprises (parking services, cleaning services, 863 urban agriculture). An attempt was done to include all the registered leather and textile enterprises in the samples. In addition, a simple proportionate stratified random sampling method was used to 864 865 select samples from 241 transformed MSEs in Addis Ababa that are graduated in May, 2011.

- 866Data were collected based on a structured person assisted questionnaire from owners/managers867of the enterprises. Analysis was done using both descriptive statistics including tools such as868frequency, mean, standard deviation and correlation and a multiple linear regression analysis to869identify the relationship between the determinant factors for MSEs transformation and870transformation indicators of average capital growth and average employment growth.
- 871 Based on the descriptive statistic the enterprises have a mean beginning capital and current 872 capital of 79164.86 and 2919631.17 respectively, and a mean begging and current employees of 873 7.88 and 37.03 respectively and a mean average employment growth and a mean average capital 874 growth of 1.1032 and 41.1029 respectively.
- The descriptive statistics reveal that majority of the source finance for their business is their own source. It is difficult to borrow money from banks because they lack collateral. On the other hand, the loans provided by micro-finance institutions are small, with short repayment periods and high interest rates. The government support in terms of finance is very low compared to other source of financing.
- The Econometric result analysis reveal the relationship between transformation indicator variables
   (average capital growth and average employment growth) and the determinant factors for MSEs
   transformation in to medium level industry in Addis Ababa city administration. Finance access is a
   major determinant factor for the transformation of MSEs in Addis Ababa.
- 884The study also reveals that finance access for micro and small enterprises is among the885determinant factors for MSEs transformation in to medium level industry. This is consistent with886previous studies (Solomon [66] and Pamela et.al [67]. Finance access has a strong relationship887with average capital growth and no relationship with average employment growth.
- The study also reveals that management know-how in business is among the determinant factors for MSEs transformation in to medium level industry. Management know-how has a strong relationship with average capital growth and no relationship with average employment growth. Most of the enterprises owner/manager has more than a mean of 10 years' experience in the business currently engaging.
- There is also a strong relationship between market access and average capital growth and no relationship with average employment growth. Market access for the enterprises include high demand for products produced, availability of raw materials, good market linkage in the city, searching for new market for products are not so difficult, good opportunity to participate in exhibitions, bazaars, and markets and access to information on market/consumer of the products.
- 898 The analysis also includes a significant negative relationship between poor infrastructure and 899 MSEs transformations. This means that poor infrastructure directly affects MSEs transformation 900 process. Power failures affect the production of goods and services and inaccessible roads affect 901 their distribution and increase transportation costs. For example, businesses may find it 902 problematic to operate in rural areas that are not accessible despite high demand for their products. This limits their ability to expand and the opportunity to generate profit. The study also 903 904 reveals no relationship between technology and average capital growth and average employment 905 growth.

- 906The study also identifies a weak relationship between the support MSEs get from the<br/>government,<br/>friends, NGOS, their families and relatives and MSEs transformation indicator variables,<br/>accounting and record keeping with MSEs transformation indicator variables. But there is no a<br/>significant relationship between government rules and regulations and MSEs transformation<br/>indicator variables.908significant relationship between government rules and regulations and MSEs transformation<br/>indicator variables.
- Finally, the study reveals the most important factor for the transformation of MSEs in to medium level industry. Based on the finding finance access, market access for their product, management know-how and government rules and regulations ranked first, second, third and fourth respectively.

## 915 **5.2 Recommendation**

- The findings revealed that a number of factors were identified for the transformation of MSEs in to medium level industry in Addis Ababa. Among the most important was finance access. The government should help MSEs in easily accessing their financial needs. Business owners should source cheap, low-interest loans from banks and other financial institutions, borrow from friends and relatives with the intent to repay the money, negotiate advance payments from customers, low tender prices, and flexible credit terms from suppliers and seek loans from micro-financing organizations.
- 923 The study also reveals a significant relationship between management know-how and micro and 924 small enterprise transformation and accounting and recordkeeping with micro and small enterprise transformation. Therefore, it is highly recommendable for the government and policy makers to 925 926 prepare management workshops and seminars that can be organized by chambers of commerce, 927 non-government organizations (NGOs), universities, and other nonprofit organizations to train 928 MSEs owners/managers about leadership, planning, organizing, communication skills, personal 929 and financial management, basic accounting, marketing strategies, and recordkeeping. Business owners should network and seek advice from experienced entrepreneurs in MSES. 930
- Attention should be given for market access for the product of micro and small enterprises. 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. They can also create a link between large industries and micro and small enterprises. This is because the finding of this study revealed that market access for their product is positively related with the transformation of micro and small enterprises in to medium level industry.
- 937There is also a significant negative relationship between poor infrastructure and MSEs938transformation. Here, it is recommended that government should take the necessary action to939build and maintain infrastructures like reliable power supply, reliable telecommunication and940internet connection, enough water supply, good road facilities, adequate business and industrial941premises (shops, offices, factories, market stands, etc.) and adequate drainage and cleaning942facilities. This is in line with what currently the government of Ethiopia is doing.
- 943Adequate accounting and recordkeeping are among the determinant factors for the transformation944of MSEs in to medium level industry in Addis Ababa city administration. Therefore, it is highly945recommendable for the government and other concerned bodies to have a training that can946support all MSEs, like book-keeping mechanisms that record financial and non-financial matters, a947Contract administration policy training, financial management mechanisms, cash-flow948management systems, financial control mechanisms, contract document interpretation949mechanisms.
- Having the above findings, the government of Ethiopia and policy makers should continue their
   efforts to a reliable and tangible transformation in terms of capital creation and employment
   generation. Government policies and strategies towards micro and small enterprises is the key to
   micro and small enterprises. Right policies considering the above factors can alleviate the

massive failures of micro and small enterprises in Ethiopia. Government should continue their
 effort towards the expansion and development of micro and small enterprises. This findings
 support the government policies towards micro and small enterprises in creating employment
 opportunities and supporting large enterprises in the country.

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# 959 5. LIMITATION AND IMPLICATION FOR FURTHER RESEARCH

The researcher wants to conduct a survey of the whole Ethiopia MSEs determinant that inhibit or limit them from transformation in to medium level industry. But because of resource constraint and width of the concept the researcher were planned to conduct the research in Addis Ababa city administration MSE only. Moreover, the research was a limitation of time, and finance. Thus, the study was designed to focus on and use mainly the primary data source for its analysis though it uses some secondary data. However, it was not simple due to the reasons that most of the respondents are dispersed and is not willing to answer questions.

Regarding further research directions, this research highlights a number of issues that give 968 969 directions on the determinant factors of micro and small enterprise transformation in to medium 970 level industry. Thus, by taking the previous studies and this study as a stepping stone, it could be 971 possible to come up with a better insight. The outcome of this study can be more robust, if future 972 researchers conduct a study on this area by taking other qualitative measure of transformation 973 such as performance, success and financial measures of ROA, profitability, and revenue 974 generated by the enterprises. Finally, interested parties to MSEs development in Ethiopia, such as universities, non-government organizations, and business development services, should address 975 976 these determinants and impediments of micro and small enterprise transformation in giving 977 assistances to MSEs.

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#### 982 COMPETING INTEREST

983 The author has declared that no competing interest exist

#### 984 985 **REFERENCES**

- Central Statistical Agency , Report on Large and Medium Scale manufacturing and Electricity
   Industries Survey, Addis Ababa, Ethiopia, 2000
- Federal Democratic Republic of Ethiopia (FDRE): Ministry of Trade and Industry (MTI). Micro and small enterprises development strategy. Addis Abeba, Ethiopia, 1997. [Online] Available:
   http://www. bds-ethiopia.net/1.../other/MSE%20Strategy%20for%20 Ethiopia.doc [Accessed:
   January 8,2013]
- 993

996

997

998 999

988

- 994 995
- 3. Gebreeyesus, M. Innovation and micro-enterprises growth in Ethiopia: United Nation University. World Institute for Development Economics Research, 2009. ISSN 1810-2611.
- 4. Ministry of Trade & Industry."Micro and Small Enterprise Development Strategy", Addis Ababa, Ethiopia, 1997
- 10005. Federal Micro and Small Enterprise Development Agency."Micro and Small Enterprise1001Development policy and Strategy", Addis Ababa,2011

- 10026. Salie Ayalew, Empirical Impact Assessment of Business Development Service on Micro and<br/>Small Enterprises in Towns of Amhara National Regional State, A Thesis submitted to the Office<br/>of Graduate Programs of Addis Ababa University in Partial fulfillment of the requirement for the<br/>Degree of Master Science in Statistics, 2007
- Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in Addis Ababa, Addis Ababa University, Ethiopia, 2004
- Rahael, Determinant factors for micro and small enterprise growth, research paper for Ethiopian development institute, Addis Ababa, Ethiopia, 2010.
- Central Statistical Agency, Report on Large and Medium Scale manufacturing and Electricity Industries Survey, Addis Ababa, Ethiopia, 2003
- 1012 10. Federal Micro and Small Enterprise Development Agency."Micro and Small Enterprise 1013 Development policy and Strategy", Addis Ababa , 2010
- 1014 11. Zewd, Jobs, Gender and Small Enterprises in Africa. Women Entrepreneurs in Ethiopia 1015 Preliminary Report. Addis Ababa, SEDP-ILO, 2002
- 1016
   12. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in Addis Ababa, Addis Ababa University, Ethiopia, 2004
- 1018 13. Ministry of Trade & Industry."Micro and Small Enterprise Development Strategy", Addis Ababa,
   1019 Ethiopia, 1997
- 1020
   14. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in Addis Ababa, Addis Ababa University, Ethiopia. 2004
- 1022 15. Central Statistical Agency, Report on Large and Medium Scale manufacturing and Electricity 1023 Industries Survey, Addis Ababa, Ethiopia. 2007
- 1024 16. Nurul Indarti and Marja Langenberg, Factors Affecting Business Success Among SMEs:
   1025 Empirical Evidences From Indonesia, Small And Medium Enterprises Development Center
   1026 (Smedc), Gadjah Mada University, Delft University Of Technology. 2008
- 1027 17. Yamane, T.,: Statistics: An Introductory Analysis; Harber and Row, New York. 1967
- 1028 18. Bruce W., Robert S., David L., Marketing Research text and cases, 2002
- 1029 19. Federal Micro and Small Enterprise Development Agency."Micro and Small Enterprise 1030 Development policy and Strategy", Addis Ababa .2010
- 20. Getie A., Research Methodology for Marketing Management teaching material, 2010, School of Commerce, Addis Ababa University, Addis Ababa, Ethiopia
- 1033 21. Getie A., Research Methodology for Marketing Management teaching material, 2010, School of 1034 Commerce, Addis Ababa University, Addis Ababa, Ethiopia
- 1035 22. Gujirati, D.N.. Basic econometrics, 4th edition, McGraw-Hill Higher Education. 2004
- 1036
   23. Liedholm, C. and Mead, D. 1990. Small Enterprises and Economic Development. The Dynamics of Micro and Small Enterprises, London/New York, Rutledge

- 1038 24. Federal Micro and Small Enterprise Development Agency (2010)."Micro and Small Enterprise
   1039 Development policy and Strategy", Addis Ababa
- 1040 25. G. E. Frazer., Accounting in Italy. American Accounting Association. The Accounting Review. 1041 1929
- 1042 26. Federal Micro and Small Enterprise Development Agency 1997."Micro and Small Enterprise 1043 Development policy and Strategy", Addis Ababa
- 1044 27. Gorman, C. "Success Strategies in High Growth Small and Medium Sized Enterprises" in D.
   1045 Jones-Evans and M. Klofsten (eds.) Technology, Innovation and Enterprise, London: McMillan
   1046 Press Ltd, 1997, 179-208.
- 1047 28. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub-1048 Saharan African economy, SAM Advanced Management Journal, 2007.
- 1049
   29. Nurul Indarti and Marja Langenberg, Factors Affecting Business Success Among SMEs: Empirical Evidences From Indonesia, Small And Medium Enterprises Development Center (Smedc), Gadjah Mada University, Delft University Of Technology.2008
- 105230. Okioma Thomas and Erick Nyakundi Onsongo, an assessment of the effect of proper book1053keeping practices on the financial performance perspectives from small and medium scale1054business enterprises in Kisii municipality, Egerton University and Kisii University College, Kisii,1055Kenya
- 1056 31. Harris, M. L., and Gibson, S. G.. Determining the common problems of early growth of small 1057 businesses in Eastern North Carolina. SAM Advanced Management Journal, 2006, 71(2), 39-45.
- 1058 32. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub Saharan African economy, SAM Advanced Management Journal, 2007
- 1060 33. Gujirati, D.N.. Basic econometrics, 4th edition, McGraw-Hill Higher Education. 2004
- 34. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia. 2004
- 1063 35. Rahael, Determinant factors for micro and small enterprise growth, research paper for Ethiopian development institute, Addis Ababa, Ethiopia. 2010
- Mulu Gebreeyesus, Growth of Micro-Enterprises: Empirical evidence from Ethiopia, Ethiopian
   Development Research Institute (EDRI). 2007
- 1067 37. Endalkachew M., Underlying Causes of Micro and Small Business Failures in Addis Ketema Sub
   1068 City: A Case Study Addis Ababa University, Ethiopia. 2008
- 38. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia. 2004
- 1071 39. Endalkachew M., Underlying Causes of Micro and Small Business Failures in Addis Ketema Sub
   1072 City: A Case Study Addis Ababa University, Ethiopia. 2008.
- 40. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia. 2004

- 1075 41. Endalkachew M., Underlying Causes of Micro and Small Business Failures in Addis Ketema Sub
   1076 City: A Case Study Addis Ababa University, Ethiopia. 2008
- 42. Bassima Chami and Evangelia Papadaki, Growth Determinants of Micro-Businesses in Canada,
   Small Business Policy Branch Industry Canada. 2002
- 1079
   43. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub-Saharan African economy, SAM Advanced Management Journal, 2007.
- 44. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia. 2004
- 108345. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub-<br/>Saharan African economy, SAM Advanced Management Journal, 2007.
- 46. Mulu Gebreeyesus, Growth of Micro-Enterprises: Empirical evidence from Ethiopia, Ethiopian
   Development Research Institute (EDRI), 2007
- 47. Bassima Chami and Evangelia Papadaki, Growth Determinants of Micro-Businesses in Canada,
   Small Business Policy Branch Industry Canada, 2002
- 48. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia , 2004
- 1091 49. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub-1092 Saharan African economy, SAM Advanced Management Journal, 2007.
- 1093 50. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub-1094 Saharan African economy, SAM Advanced Management Journal, 2007.
- 1095 51. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia, 2004
- 1097 52. Nurul Indarti and Marja Langenberg, Factors Affecting Business Success Among SMEs:
   1098 Empirical Evidences From Indonesia, Small And Medium Enterprises Development Center
   1099 (Smedc), Gadjah Mada University, Delft University Of Technology, 2008
- 1100 53. Nurul Indarti and Marja Langenberg, Factors Affecting Business Success Among SMEs:
   1101 Empirical Evidences From Indonesia, Small And Medium Enterprises Development Center
   1102 (Smedc), Gadjah Mada University, Delft University Of Technology, 2008
- Simeon Nichter and Lara Goldmark, Small Firm Growth in Developing Countries, University of California, Berkeley, CA, USA and Development Alternatives, Inc., Rabat, Morocco, World Development, 2009. Vol. 37, No. 9
- 110655. Lumpkin, G. T., and Dess, G. G.. "Clarifying the Entrepreneurial Orientation Construct and linking1107it to Performance." Academy of management Review, 1996 .21 (1), 135 172 Maria Clara
- 1108 56. Nurul Indarti and Marja Langenberg, Factors Affecting Business Success Among SMEs:
   1109 Empirical Evidences From Indonesia, Small And Medium Enterprises Development Center
   1110 (Smedc), Gadjah Mada University, Delft University Of Technology, 2008
- 57. Simeon Nichter and Lara Goldmark, Small Firm Growth in Developing Countries, University of California, Berkeley, CA, USA and Development Alternatives, Inc., Rabat, Morocco, World Development ,2009.Vol. 37, No. 9

- 1114 58. Bassima Chami and Evangelia Papadaki, Growth Determinants of Micro-Businesses in Canada,
   1115 Small Business Policy Branch Industry Canada, 2002
- 59. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in Addis Ababa, Addis Ababa University, Ethiopia, 2004
- 1118 60. Bassima Chami and Evangelia Papadaki (2002), Growth Determinants of Micro-Businesses in 1119 Canada, Small Business Policy Branch Industry Canada
- 1120
   61. Bassima Chami and Evangelia Papadaki, Growth Determinants of Micro-Businesses in Canada,
   1121
   Small Business Policy Branch Industry Canada, 2002
- 1122 62. Bassima Chami and Evangelia Papadaki, Growth Determinants of Micro-Businesses in Canada,
   1123 Small Business Policy Branch Industry Canada, 2002
- 1124 63. Mulu Gebreeyesus, Growth of Micro-Enterprises: Empirical evidence from Ethiopia, Ethiopian 1125 Development Research Institute (EDRI), 2007
- 64. Bassima Chami and Evangelia Papadaki, Growth Determinants of Micro-Businesses in Canada,
   Small Business Policy Branch Industry Canada, 2002
- 112865. Mulu Gebreeyesus, Growth of Micro-Enterprises: Empirical evidence from Ethiopia, Ethiopian1129Development Research Institute (EDRI), 2007
- 66. Solomon Worku, Socio Economic Determinants of Growth of Small Manufacturing Enterprises in
   Addis Ababa, Addis Ababa University, Ethiopia, 2004
- 1132 67. Pamela, Okpara, John O. Wynn, Determinants of small business growth constraints in a sub-Saharan African economy, SAM Advanced Management Journal, 2007.