

The Impact of Subsidy on the Growth of Small and Medium Enterprises (SMEs)

Biru Ashenafi Gebremichael

Department of Cooperative Studies, College of Business and Economics
Mekelle University, Ethiopia.

P.O.Box: 1790, Mekelle, Ethiopia. Phone: +251-914-709654 E-mail: ashergmichael@yahoo.com

Abstract

The Ethiopian economy can be largely characterized as an agrarian economy. In spite of the fact that the economic growth performance was poor in the past; the country is experiencing strong economic growth presently. In accelerating the industrial transformation process, reducing unemployment and alleviating poverty, the government considered SMEs as the strategic sector by recognizing that they play significant role in stimulating business, creating employment and encouraging innovation which is a base for industrialization. However, in some situations, the support and subsidy for SMEs becomes the determining factor in weakening them and make them more dependent.

The result of study shows that the support by the government is more at the lower level of enterprises. But, when the enterprises grow the support decreases accordingly. Thus, as the SMEs do not have any incentive to grow, they prefer to stay small rather than grow to medium or large enterprises and this results dependency and inefficiency in the operation of SMEs.

Keywords: SMEs, Subsidy program, growth, income, employment, dependency.

1. Introduction

The Ethiopian economy can be largely characterized as an agrarian economy. More than 85% of the population is engaged in agriculture, which has generated on the average 44.7% of real GDP growth rate for the last seven years. The industrial sector's contribution to real GDP growth rate is 10.9 % for the last seven years. In spite of the fact that the economic growth performance was poor in the past; the country is experiencing strong economic growth at the current time.

In accelerating the industrial transformation process, reducing unemployment and alleviating poverty, the government considered SMEs as the strategic sector by recognizing that they play significant role in stimulating business, creating employment and encouraging innovation which is a base for industrialization. "Proponents of policies and programs to support small firms have long claimed that they are more labor intensive, efficient, equitable in distributing the income that they generate, widely dispersed geographically, and nurturing of entrepreneurs" (Nichter & Goldmark, 2005, P. 1; Daniel Agyapong, 2010). Moreover, the micro and small enterprise sector speeds up the competitive strength of a national economy by generating employment opportunities for a lot of the people, adding flexibility and industrial diversification, and making use of resources that may otherwise not be used in the development process (Abeka & Evance Ochieng, 2011).

Indeed, policies to promote the development of SMEs are common in both developed and developing countries. Policies designed to assist SMEs, especially in developing economies, have been an important aspect of industrial policy to alleviate poverty and accelerate industrialization of a country.

SMEs do not have a universal acceptable definition. In the case of Ethiopian SMEs are generally defined as, Micro business is a business enterprises which involves one to five employees and having capital of less than or equal to 50,000birr when the business is in the service sector; and the capital needs to be less than or equal to 100,000birr if it is in industry.

In Ethiopia, next to the agriculture sector, the SME is the second largest employment-generating sector (Fiona Meehan, 2004, P. 2). Thus, the government of Ethiopia gave due attention to the growth of SMEs, especially for women, as a means to reduce poverty and employment creation (Rahel & Issac, 2010). In some developing countries, which have great economic achievement, "SMEs by virtue of their size, location, capital investment and their capacity to generate greater employment, have demonstrated their powerful propellant effect for rapid economic growth" (ILO, 2003).

Small and Medium Enterprises contribution towards promotion of employment for young entrepreneurs and economic development of the country is widely acknowledged. In contrast, there are strong arguments that supporting and subsidizing SMEs will result in inefficiency, discourage competitiveness and become a bottleneck factor for development of SMEs. The SME sector in Ethiopia is tied up with a number of problems that mitigate its growth and expansion, thereby minimize its vital role in national economic development and improve the women's economic empowerment (ILO, 2003). The private sector in Ethiopia remains underdeveloped, which accounts for less than 50 percent of total employment in the formal urban sector. But at this time the situation seems to be changing and the SMEs sector is playing a vital role in the industrial

development of Ethiopia. It is recognized that this sector provides not only employment opportunities, but it is also an effective means of alleviating poverty and reducing income inequality.

The rapid development of SME depends on the participation and integration of all development actors in active and wide range of support areas. This range from the self-help groups of SME themselves and the eliminating of regulatory barriers and strong support and subsidy by federal or regional government. However, in some situations, the support and subsidy for SMEs becomes the determining factor in weakening them and becomes a bottle neck for their promotion and development.

Though different studies have been conducted in regard to the role of SMEs on the employment, income and on the importance of SMEs on social and economic area, it has been said that that the effect of subsidizing SMEs in accelerating the industrial transformation process in Ethiopia is not yet fully understood and evaluated. Thus, this requires a detailed evaluation process of the performance of SMEs activities.

Hence, the main objective of this study is to analyze the subsidy program for SMEs in Ethiopia in terms of their growth towards accelerating the industrial transformation process.

2. Research Methodology

This study focuses on Ethiopian SME's subsidy program and industrial transformation process, in the case of Tigray Region. There are also a number of SMEs which the researcher can have good access to important data and information on this research topic.

In order to achieve the research objectives and come up with possible answers to the research questions, data was gathered from the regional and federal ministry of trade and industry annual reports from 2008 to 2011. Moreover, to come with strong arguments and concepts of SMEs, the researcher has read different articles and some background information about the condition of SMEs in Tigray region and Ethiopia.

After the region and the annual reports were selected, a stratified random sampling was employed to select the type of SMEs. For the purpose of this study, these SMEs were organized into different strata based on establishment year, start-up capital, and number of members in the group. Thus, they can provide more information than these which do not involve in the subsidy program activities.

Both primary data and secondary sources of data are utilized for the study and to complement the official annual report and to get in-depth insight in the changing nature of SMEs, a focus group discussion covering different topics, direct field observation by the researcher and Informal discussions was carried out. All the data are organized analyzed and expressed using descriptive as well as econometric analysis. With regard to econometric analysis the most celebrated model, i.e., the logit model analysis to address the growth rate of SMEs with the subsidy program has adopted.

2.1. Conceptual Framework

The conceptual framework illustrates the structure and elements of the paper. Its main intention is to offer a direction for conducting a research on the role of the subsidy program in SMEs growth in terms of their contribution to accelerate the industrial transformation process.

To analyze how the subsidy programs influence SMEs performance, the framework differentiates between the "context" and the "action arena" section. The "context" deals with the first factors that create up the opportunity set for possible action. Five main features of the context are recognized for assessment of their role in SMEs growth and their relationship to the SMEs subsidy program: Unemployment rate, the industrialization plan, the shortage of capital, the SMEs subsidy program and SMEs legal framework.

The "action-arena" indicates how various actors, including organizations, individuals and government make use of and change institutions to the development and growth of SMEs.

The results of action situations, which are of particular interest in our analysis, can be notable between structural outcomes, which influence the existing context, including SMEs subsidy program, and outcomes which influence the situation of the SMEs and the industrialization process. The five criteria are: income, employment level, innovation and contribution to industrial transformation.

2.2. Model Specification

Empirically, growth of small and medium enterprises broadly discussed in terms employment of growth. According to Liedholm and Mead (1999) cited Solomon (2004), there are three ways of defining employment

growth which describes as Annual Compound Growth Rate (ACGR), and Average Annual Growth Rates (AAGR) measured in percent and Average Annual Growth in jobs (AAGRJ) since start up the business measured in number of jobs created. But the Compound Annual Growth Rate (CAGR) is more popular, as much more precise assessment of the timing of employment growth effects and it deals with a rate of growth what an enterprise will be reached growth in employment over the years on an annually compounded basis measured in percent. In this case, the model of firm growth becomes (Liedholm and Mead 1999).

$$Y_i = \left[\left(\frac{X_i}{X_t} \right)^{1/\alpha} \right] - 1 \quad (1)$$

Where

Y_i = employment growth rate at the moment

X_i = current employment size of the enterprise

X_t = initial employment size of the firm

α = age of the enterprise

According to Habtamu, et.al (2013), growth in terms of employment is considered as dichotomous variables 1 and 0, and used a logistic regression model where 1 refers the availability of growth and 0 not. For that matter, growth to medium level enterprise or reached to exist the number of employees will be increased by more than 50% now from the start up time. The objective of this study focus on the effect of government subsidy on SME's growth, the appropriate method of estimation is maximum likelihood that analyzing the probability of non growing firm via proxy factors of which inhibited for growth of SMEs and the model specification will be.

$$y^* = X_i \beta_i + u_i \quad (2)$$

$y^* = 1$, SMEs non growth

$= 0$, growth

y^* is the underlying latent variable that indexes the measure of probability of non growing firm, U_i is the stochastic error term, X_i a column vector of explanatory variables and β_i is regression coefficient to be estimated. Following (Green, 2003), and

$$P(y^* = 1 / X_i) = \frac{\exp(X_i \beta)}{1 + \exp(X_i \beta)} \quad (3)$$

For any vector β the probability of observing y^* conditional on X_i in a likelihood function expressed as

$$L(\beta / X_i) = \prod_{i=1}^n P_r(y^* = 0)^{1-y^*} * P_r(y^* = 1 / X_i \beta)^{y^*} \quad (4)$$

The over all probability of observing a sample is simply the product of the individual probabilities (being non growing firm and growing firm) and estimated by transferring in to log likelihood function.

$$\ln L(\beta / X_i) = \sum_{i=1}^n (1 - y^*) \ln P_r(y^* = 0 / X_i \beta) + y^* \ln P_r(y^* = 1 / X_i \beta) \quad (5)$$

Coefficient of the above result shows only the sign effect of the variables on the probability of non growing firm. Then, the marginal effect of a particular independent variables X_i on the probability of the occurrence of the response is given by (Green. et.al, 2003).

$$\frac{\partial P(y^* = 1)}{\partial X} = \frac{\exp(X_i \beta)}{1 + \exp(X_i \beta)} * \beta \quad (6)$$

Finally, unlike to OLS in which the minor effects are constant, in the case of logit model, we have to calculate them at different levels.

3. Result and Discussion

3.1. Size Distribution of SMEs by Sector

In this section, we shall present a brief description of SMEs characteristics in the business sector, employment creation, and type of enterprises, and current SMEs capital. Table 1 below presents the size distribution of SMEs in terms of employment and capital. It shows that the construction sector has created jobs for 6257 employee, in 498 enterprises, which account 42.75% of the total jobs created by the participant SMEs. This is nearly 13 employees per enterprise on average. Trade seems to have created next higher job opportunities, 3150 employees (21.50%) in 820 enterprises. This is nearly 4 employees per enterprise on average. The service sector has also created jobs for 2900 employees (19.82%) in 457 enterprises which are above 6 employees per enterprise on average. The least contributor to job opportunity in this study is the handicraft sector, for only 45 employees (0.30%) in 20 enterprises. A textile is also another sector which does not contribute much to job opportunity; 345 employees (2.40%) in 190 enterprises.

Ayyagari and colleagues (2011, p.23) found that small firms are important contributors to total employment and job creation. The author's result further shows that the contribution of SMEs to increase productivity is not high as the large enterprises. SMEs are sources of employment for a large number of people compare to large firms though.

With regard to enterprises' mean capital, three sectors have high and relatively similar means irrespective of the number of their participants. That is, the capital means for construction, urban agriculture, and handicraft are 137,715.94 and 149,481.48 respectively. The capital mean shows that even though the handicraft sector does not soak up more employees, least contributor to job creation, it owns or mobilizes huge capital.

Insert table 1

Unlike its job creation contribution (about 4 employees per enterprise), urban agriculture also contributes much capital on average. These are because such sectors need much capital with relatively less labor. For instance, the handicraft sector occupation of gold smith needs much capital with few employees. The size distribution of SMEs indicates that the textile sector is relatively low, contributing in both job creation (below 2 employees per enterprise on average) and capital contribution (capital mean = 35,008.705 ETB'S).

The role of SMEs in employment and income generation is increasingly recognized for the unemployed people, especially for women, and has become a major playing field for policymakers and donors with dual objectives of enhancing growth and alleviating poverty (Rahel & Issac, 2010, P. 233).

3.2. Firms' Age and Sectoral Distribution

Figure 1, shows the life span of SMEs in each sector. Ages of SMEs are simply classified into four: ≤ 5 , $5 < x \leq 10$, and > 10 years of age. The ages of SMEs are calculated from their year of establishment. Figure 1 depicts that, there are more young SMEs in the age range of three years and below. One can observe that more SMEs are established in the last five years especially in the trade (552 enterprise/ 67.31%) construction (300 enterprises/ 60.24%) and service (328 enterprises/ 71.77%) sectors. As already seen in Table 1, construction and service

sectors are best contributing to job opportunity and diversifying in these sectors may be more advantageous. Scholars wrote on average that young enterprises rapidly grow and contribute more as compared to older enterprises. The relationship between age of enterprise and growth of small enterprise in developing countries is particularly strong (Nichter & Goldmark, 2005, p. 24; 2009, p. 1456). These writers found out that on average young SMEs grow considerably more rapidly than old small enterprises. This may inform policymakers and administrators to always have newly established or young enterprises (SMEs) in selected sectors.

Insert Figure 1

The above chart indicates most of the 'trade' sector has many enterprises (198) in the age of 5 to 10 years group, followed by 'construction with 150. In the age group of above 10 years trade sector has many units with 78 followed by construction sector with 48 units. Thus mainly two sectors have many units in the age group of 5 years and above.

3.3. Government's subsidy to SMEs Growth

The Ethiopian government has tried hard to establish a conducive environment that encourages and supports SMEs. The growth of the small and medium-sized enterprise (SME) sector remains limited, though. Subsidizing SMEs may not only encourage start-ups, but it will also support firms to grow from their informal business position to the formal sector position. The government is well informed about the positive social and economic contribution that small and medium-sized enterprises (SMEs) can play in the development of the country. The contributions of SMEs in increasing innovation, adopting new technology and know-how, creating jobs and in diversifying business risks are well recognized. When SMEs launch new products, the benefits can be extended to other sector of the economy. According to Brixiova (2007), "the role of the private sector, including SMEs, as engine of growth was illustrated by the postwar recovery in Austria and Germany and by the diverging paths of Central and East European and Baltic countries".

The government encourages SMEs through providing credit access at low or zero interest rates, free land accessibility, tax exemption, priority in government bids, technical and managerial support. However, the government's support to SMEs declines gradually when they show growth. This means that the support is highest when the business is at starter level, then lesser support when it grows from starter to growing; and even from growing to maturity this may encourage dependency than doing for growth. If the SMEs wouldn't grow; the number of medium level enterprises couldn't increase consequently. According the group discussion with key informants, thus, the SMEs have not any interest to grow more and accumulate capital. This obviously led to dependency on government and others which provide subsidy to them.

3.4. SMEs Credit Support Mechanism

With cooperation of governmental banks and other financial and intermediary banks, the government provides credit access to micro and small enterprises at low or no interest rates. In other words, the credit support can be considered as financial support on government or bank loans.

In order to encourage the infant SMEs the government has signed agreements with banks so as to create financial access at an agreed interest rate to eligible SMEs where eligibility rules are pre-determined by Ministry of Trade and Industry and the banks together. The SMEs are responsible to pay back the principal amount to the credit provider institutions at the specified payback period. The government will pay the interest cost to the banks and other financial institutions, which provide credit access to SMEs at no or low interest rate.

Such support is provided to SMEs when they got legal certificate and legal personality in conducting their business from the appropriate body of the government. Informal sectors are not subject to be supported by the government and other institutions.

The government provides different financial support programs on various aspects of SMEs such as employment creation, export development, infrastructure, industrialization and the machinery and equipment for food sector. Moreover, to encourage value add activities and increase competitiveness in production and to help SMEs to produce standardized products; the government facilitate credit accesses and other necessary supports.

3.5. SMEs Contribution to Regional Economy and Performance

In the previous decades, the contribution of SMEs in national economy has been undermined and even interpreted in wrong way. SMEs were believed to slow down the economic growth by drawing scarce resources from their large business firms (Audretsch, et al., 2001). Until 1960s, big corporations capitalizing on generating

economies of scale were considered as a driving force of development and industrialization. However, the emergence of new technology and computer-based production system, information and administration has reduced the contribution of economies of scale in many large business sectors. Different studies such as Acs & Audretsch, 1993, have indicated that a shift in industrial structure from centralization and greater concentration towards less concentration and decentralization, which ensures the increasing role of small business firms. This shift has occurred due to the systematic change in production technology, labor supply, consumer demand, the interest of flexibility and efficiency. In turn, these changing factors led to the new structure and reducing the size of large firms and reduces the entry barriers of new firms to the market. Furthermore, evidences became available to show that the economic activities shifted away from the big to small firms, mostly SMEs.

Then, considering the changing pattern of consumer's demand and expenditure, SMEs are the driving forces and key elements in creating employment and ensuring economic growth and development. In the other way, this pattern shift has achieved a renewal contribution in the growth of SMEs and entrepreneurial development at regional, national and international levels.

Now a days, so many researchers have came up to ensure that SMEs can play an important role in contributing to the overall national economic performance, thereby reduce poverty in general and unemployment in particular (Zoltan J Acs, Howard E Aldrich. et al. 2009). SMEs can play a vital role in community development by tempting investments back into poor and backward areas and expand the advantages of economic growth to poor people and places where too often left behind. When the capital investment increases, SMEs can create huge employment and opportunities that can develop and build communities and social activities in rural areas as well as in small towns. Therefore, the economic contribution of SMEs to social, economic growth and employment opportunity is now well recognized and establish its strong base in the literatures.

This section presents the role of SMEs in economic growth in terms of employment creation, contribution to GDP, income distribution, and women's empowerment.

3.6. Sectoral Contribution

In this sub section, an interesting finding of the survey under discussion was that the SMEs contributed more than 188.4 million Birr to the regional economy. Those who tend to look down on small and medium industries may be shocked to note that small enterprises contribute more to the economy than large firms. Small enterprises are credited for having contributed 82.98 percent share of the total SMEs contribution to the economy, followed by medium enterprises contributing 16.52 percent (for details, refer Table 2).

Insert Table 2

Women's Empowerment in the SMEs Sector

Women play a significant role in every country's economy, and as their literacy rate is often low and their social and economic status in the society is usually lower they participate in businesses which do not require high professional skill and education. This situation makes women highly present in the micro and small enterprises sub-sector.

Lack of women's empowerment is a major factor in extreme poverty; in turn, a focus on improving the socio-economic status of women helps to alleviate poverty and ensure security for women, their families and whole communities. Participation of women in SMEs is a tool to achieve the goal of empowerment. Social empowerment, followed by economic benefits to the people from small business enterprises, and supplemented by net profits from sale of services and produce of the SMEs have all increased their stakes. The ability to decide and plan their own development interventions, through program plans executed with the cash from revolving funds of their own, is their biggest source of empowerment. According to the research done by Mekelle University in SMEs development in Tigray region, the number of women who participate in SMEs is improving from time to time. This is due to the fact that the existing environment becomes more conducive for women to have the opportunities to trade their services and products they produce and the exposure they receive enables them to involve themselves in different business activities.

Moreover, the study has reported that since women account for half or more of the population and constitute a significant part of the SME entrepreneurs in total (27.92%), this study try to assess the benefits and barriers specific to women entrepreneurs.

The issues such as the need for permission to start up an enterprise, perception of women entrepreneurs on gender issues such as equality and decision making and general living standards of females are the main focus factors.

Women entrepreneurs face many challenges and constraints from their families when they attempt to begin a business. While some families are strongly against the idea of women lead and setting up a business enterprise, others give big support. The research finding indicates that more than half of the participant women entrepreneurs (51.13 %) did not consult or get need permission from their families to start up an enterprise. Besides, the majority of women entrepreneurs (84.4%) perceived that there is improved access to use and control resources due to their participation in SME.

The government support to encourage women to improve their socio-economic status is vital. Thus, Ethiopian government gives due attention to women's participation in SMEs. For example, some sectors such as car parking services and solid waste collection are predetermined for women. Members of the enterprise should include 50% of women. This is because the activities are fully outsourced by government.

3.7. Determinants of Performance of SMEs (Econometric Investigation)

Econometric method is employed to estimate the factors affect growth performance of the SMEs by running the following regression equation:

$$y^* = X_i \beta_i + u_i$$

Where, y^* is the underlying latent variable that indicates the compute of probability of non growing firm, U_i is the stochastic error term, X_i a column vector of explanatory variables and β_i is regression coefficient to be estimated

To the measure of growth performance of SMEs in terms of employment growth¹ and the explanatory variables are:

- Age and SMEs capital, the logarithm of the enterprise age, and the logarithm of initial capital, are included in the analysis to examine the dependence of an enterprise's growth on its age and initial size.
- The sector dummies are considered in the analysis in order to get any possible effects of working in the other subsectors contrasted with the construction as the base sector.
- Business ownership type: the reason of adding the business ownership dummies partner and cooperatives is to examine whether any major effects of being registered as partnership, sole proprietorship, or limited liability on enterprise growth compared to corporations as the base exists. The data of unregistered enterprises are not included from the sample due to the number of unregistered enterprises is too small.
- Access to credit is considered in the analysis model in order to examine the effects of credit support by the government.
- The government facilitates linkage of SMEs with other private and governmental organizations. Thus, linkage is considered since being related with other business organizations may have positive contribution on growth of SMEs in terms of market opportunities which could create new markets opportunity or increase productivity.
- Technology is a dummy variable that has direct relationship with growth of small firms.

Estimation Result

Applying linear regression to estimate the parameters of the model, both Breusch-Pagan and White tests for heteroskedasticity rejected homoskedasticity. As a remedy White standard errors have been computed and the results are reported in Table 3.

Insert Table 3

¹ Different authors use different dependent variables such as employment, sales, productivity, value added growths

As can be seen from Table 3, the conclusion reads that credit facility; initial capital and linkage variables are significantly correlated with growth of SMEs. SMEs with credit accessibility, high linkage and higher initial capital tend to have significantly higher growth rates than SMEs with lower linkage, credit access and initial capital. Putting it differently, other factors being equal, SMEs that have government support and subsidy have higher average growth rates than SMEs without government support. Besides, the technology dummy shows that SMEs that use modern technology (equipment) do have higher growth rates, other factors influencing growth remaining constant. There are, however, a number of other variables that show a significant correlation with growth. Initial capital is a most significant variable.

Two things are worth nothing from Table 3. First, as indicated by the cooperative dummy, cooperatives tend to have higher sales growth than sole proprietors and there is no difference in sales growth between sole proprietorships and partnerships. This finding has an important policy implication. Second, the business line/sector in which SMEs operate has a significant impact on growth. Holding other factors constant, SMEs operating in the construction and manufacturing sectors do have higher average growth rates than SMEs operating in other sectors. These findings are similar to the findings of (Gebrehiwot, A. & Wolday, A., 2006).

3.8. Institutional Linkage of SMEs and Industrial Growth

Support provision by public institutions, technology transfer centers, legal aid centers, business leadership coaching, market information centers have a direct relationship with SMEs' development in capacity building. Besides, having market information access or new innovation may help small enterprises react to new opportunities, while the absence of all above have negative impacts and are comprehended as constraints on SMEs' growth and sustainability (Mead, D. C. & Liedholm, C. 1998).

There are divergent views on whether the expansion of markets encourages SME growth and sustainability (Uzor, O, 2004).

The manufacturing sector in Ethiopia is quite small and accounts for around 11% of the GDP and an even lesser proportion of total employment. The vast majority of manufacturing establishments are small and cottage types. The modern manufacturing sector, which includes medium and large-scale private units, employs only one-fifth of the manufacturing labor force but generates the largest share of value added manufacturing. It is, however, difficult to go much beyond these indicative figures about the relative importance of different plant size classes in the manufacturing sector because of the lack of comprehensive data and ambiguities surrounding any classification of industries by plant size.

When there is high proportion of SMEs product for further production, their contribution to industrial growth is expected to be high. With regard to the customers of SMEs in the study, 65.92% are urban and the remaining 34.08% are rural customers, respectively.

Table 4, shows the linkage of SMEs with various partners and with varying levels of linkages expressed in terms of percentage. The table shows that most of the enterprises have low linkage with various partners.

83.95% of the participants of SMEs have no linkage with universities and research centers; 88.36% of them have no linkage with companies outside the region; 81.59% of the participants SMEs have no linkage with NGOs. On the other hand, a considerable proportion of SMEs (30.41%) is highly linked with other companies in the region (suppliers, customers, partners etc.). Next to this partner, public institutions of Tigray region are highly linked with 25.96% of the participant SMEs. 19.54% of the participant SMEs are also highly linked with Regional colleges/TVETs/.

Insert table 4

4. Conclusions and Policy Implications

It is strongly believed that the methodologies we executed and the models employed would allow comprehending the full picture of SMEs in the region. The study come up with concluding result of the role of SMEs in economic growth in terms of employment creation, contribution to GDP, income distribution, and women's empowerment in Tigray region is encouraging. But regarding institutional linkage of SMEs, the result shows that most of the enterprises have low linkage with various partners.

The result showed that SMEs generating more employment compare to large firms. The reason is that the government's conducive policy to support and encourage SMEs. The study revealed that the government is well attentive of the positive contribution that micro, small and medium enterprises (SMEs) can play in the economic growth and development and encourages them through providing different supports, their dependency level is increasing. This is due to the reason that the government's support to SMEs declines gradually when they show growth from micro to small, small to medium and medium to large enterprises. Thus, they don't have any incentive to grow more, rather results dependency.

With regard to SMEs contribution towards industrialization, the study come up with the result that when there is high proportion of SMEs product for further production, their contribution to industrial growth is expected to be high. In the linear regression analysis, SMEs' initial capital, credit accessibility, linkage and technology affect SMEs employment growth positively. In addition, cooperatives do have higher average sales growth than others do. The same is true for SMEs operating in the construction sub sector. According the group discussion with key informants, the study reach into conclusion that Access to credit and need-based training are other important determinants of small business growth and sustainability.

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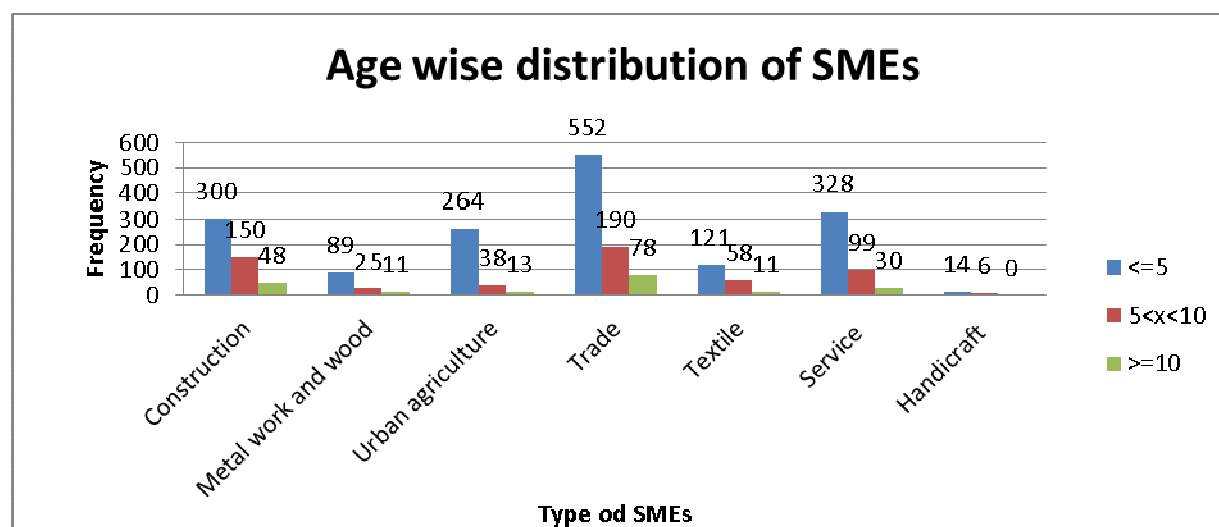
List of Tables and Figures

Table.1 SMEs Size Distribution by Sector as of 2011

Sector	Size				
	Number of employees	Percentage	Mean	Number of Enterprises	Capital Mean in ETB ¹ (in 000's)
Construction	6257	42.75	12.56	498	138
Metal work and wood	587	4	4.70	125	126
Service	2900	19.82	6.35	457	131
Urban agriculture	1350	9.23	4.29	315	144
Textile	345	2.4	1.82	190	72
Trade	3150	21.50	3.84	820	214
Handicraft	45	0.3	2.25	20	149
Total	14634	100	35.81	2425	974

Source: Primary data collected through annual report survey, 2011 Ministry of Trade and Industry, Ethiopia

Figure 1. Firms' Age and Sectoral Distribution



Source: Primary data collected through annual report survey

Table 2. Contribution per Person Engaged by Firm Size

Size	Value-added per person engaged
Small	25319.624
Medium	498.471
Large	273.78
Total	26,091.875

Source: Primary data collected through annual report survey

¹ 1 dollar is approximately 18.00 ETB

Table 3. Regression Results

Dependent Variable: Sales growth

Independent variable	Coefficients
Age	-.0003665 (.0009564)
Log of Initial Capital	.2226491** (.0559804)
Linkage	.680456 (.0502878)
Credit facility	.733363** (.0525662)
Technology	.6185513* (.1921606)
Partnership	.2372483 (.580942)
Cooperative	.7907937 * (.27109)
Sole proprietorship	.333363 (.4225662)
Handcraft	-.5037278 (1.17442)
Metal and Wood	-1.282027* (.4322037)
Trade	-.726415 (.3775554)
Service	-.647896 (.3234759)
Textile	-1.116324 (.5344333)
Urban agriculture	-1.282563 ** (.3257294)
Constant	8.105526** (.5991336)
Observations	337
R-Squared	0.2762
Adjusted R-Squared	0.2377

***Notes: Values in brackets denote standard errors; one and two asterisks denote significance at 5, and 1 percent levels respectively.*

Table 4. Institutional Linkage

Linkage with various partners	Level of linkage (in percentage)		
	No linkage	Moderate linkage	Highly linked
Public institutions of the region	59.79	14.25	25.96
Regional colleges/TVETs/	67.77	12.69	19.54
Universities and research centers	83.95	9.28	6.77
Other companies in the region (suppliers, customers, partners etc.)	50.79	18.8	30.41
Technology transfer centers	74.76	10.69	14.55
Companies outside the region	88.36	6.69	4.95
NGOs	81.59	8.17	10.24

Source: Primary data collected through annual report survey