

ORIGINAL ARTICLE

Determinants of Micro and Small Enterprises' Effectiveness in Urban Employment Creation in Debre Birhan town, Ethiopia

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Abstract

Although the role of Micro and Small Enterprises (MSEs) in employment creation is important, many challenges are adversely affecting their contribution. This study was focused at assessing the determinants of MSEs' effectiveness in employment creation at Debre Birhan town, Ethiopia. The study used a cross-sectional research design. The collected data from 406 survey questionnaires were analyzed through binary logistic regression. The result shows that the majority 231(56.9%) of MSEs were ineffective in employment creation. The result of binary logistic regression analysis revealed that MSEs which experienced politico-legal, infrastructural, marketing and financial challenges were 4.866 times (AOR=4.866; 95%CI:2.389, 9.910), 1.958 times (AOR=1.958; 95%CI:1.029, 3.725), 4.265 times (AOR=4.265; 95%CI:1.729, 10.525) and 2.569 times (AOR=2.569; 95%CI:1.527, 4.321) more likely ineffective in employment creation. To sum up, the finding revealed that politico-legal, marketing, financial and infrastructural challenges had positive contribution to MSEs' ineffectiveness in employment creation. Accordingly, the study recommended that government bodies shall invest their resources in addressing politico-legal, marketing, financial and infrastructural challenges; while if their resource is too limited by giving priority from first to last.

Keywords: Micro and Small Enterprises; Effectiveness; Employment Creation early

1. Introduction

Extreme poverty, unemployment, low per capita income and unequal income distribution are some of the major problems of many countries, mainly of developing countries. Accordingly, establishing and supporting Micro and Small Enterprises (MSEs) through allocating ample resources is one of the best strategies and policies of governments of least developed countries (LDCs). Besides, national and international non-governmental organizations (NGOs) have also spent considerable attention and resources, directly or indirectly, on improving the MSE effectiveness (Mulugeta, 2011). Similarly, the government of Ethiopia gives much attention for MSEs in view that they are essentially important to create job opportu-

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nities for the unemployed and improve the quality of life, reduce disparities of income distribution and hence maintain fair economic growth within the state (Kefale & Chinnan, 2012).

The number of MSEs which are planted at worldwide level are estimated to be 420 to 510 million (Stein, Goland, & Schiff, 2010). Although MSEs are driving forces for economic growth, job creation and poverty reduction in developing countries (Drbie, 2013), they are playing better roles in developed countries than developing countries. For instance, when they contribute for more than 50% to their Gross Domestic Product (GDP) and 60% to employment creation in developed countries, their contribution was less than 17% and 30% to their GDP and employment in developing countries respectively (Beck, Demirgüç-Kunt, & Levine, 2006). However, it does not infer that their roles or effectiveness should be identical across developed or developing countries.

Even though there is a general positive environment for the development of MSEs, there are also challenges that hinder the potential roles of the MSEs (Fanta & Megento, 2018; Kefale & Chinnan, 2012). Due to natural and manmade factors, resources as well as challenges faced by MSEs are not identical across countries and regions. It makes the performance and working environment of MSEs vary from country or region to the other. Therefore, the effects and types of determinant factors which contribute either to boost/knock the effectiveness of MSEs in employment creation are relative (Reeg, 2015). For instance, existing literatures revealed that the share of MSEs from the total employment creation was 48% in North Africa, 51% in Latin America, 65% in Asia, 26.2% in the United States, 67% in Japan and 80% in India (Gebremariam, 2017). This infers that performance of MSEs in employment creation is varying from country to country; and the level of MSEs' ineffectiveness in employment creation and associated factors need to be studied in the context of each country. This is especially true for developing countries like Ethiopia since their resource to address all challenges faced by MSEs at the same time is too limited. Identifying the weight of impact of challenges over MSEs helps them to properly address each problem step by step or devote their resources on major challenges.

The Ethiopian government gives a special focus on promising MSEs to create job opportunities for the unemployed and improve the quality of life, reduce disparities of income distribution and hence maintain fair economic growth (Kefale & Chinnan, 2012). In spite of the encouraging outcomes achieved in supporting the MSE sector in Ethiopia, the challenges facing MSEs are yet unresolved (Shanka, 2016). This might be due to the fact that previous studies (Abdissa & Fitwi, 2016; Abera, 2012; Alemayehu & Gecho, 2016; Bereket, 2010; Desalegn, 2016; Drbie & Kassahun, 2013; Ergo & Woldekidan, 2018; Gebreyohannes, 2015; Mulugeta, 2011; Wakjira, 2010; Weldegbriel, 2012; Zemen & Mohammed, 2014) which focused on assessing the challenges of MSEs failed to apply standard quantifier model to estimate the weight of each challenge over MSEs' effectiveness in employment creation. According to Debre Birhan Town Administration Technical and Vocational Enterprises Development Office, there were 1513 MSEs that works in different sectors in the town. Understanding the challenges that limit the effectiveness of MSEs in employment creation in Ethiopia in general and in Debre Birhan Town in particular is significant to promote the significance to take proper intervention. Thus, this research gave attention to computing the weight of each determinant factor towards MSEs' ineffectiveness in employment creation in Debre Birhan town.

2. Objectives of the Study

By focusing on Debre Birhan town, objectives of the study were: to assess the status of MSEs' effectiveness in urban employment creation; and to identify determinant factors of

MSEs' effectiveness in urban employment creation.

3. Materials and Methods

3.1. Study Area

The study was conducted at Debre Birhan town of North Shoa or “Semen Shewa” zone in Amhara Regional State of Ethiopia. Debre Birhan town was established in 1454 by Emperor Zera Yaeqob. Currently, the town is serving as the seat of North Shoa Zone Administration, Debre Birhan town Administration and Bassona Worana Woreda (district). The town is located at 130 kilometers in the Northeast direction along the Addis Ababa–Dessie-Mekele route. Astronomically, the town is positioned at 9°41' North latitude and 39°40' East longitude and characterized by cool temperate climate. In the town, there exist one public University, various colleges, schools, banks, both public and private hospitals, various clinics and higher secondary and preparatory schools. Regarding the physical infrastructure of the town, the main roads of the town are asphalted; the rest of the interior roads are non-asphalted. However, the town's administration is paving interior roads by laying cobblestones. Electricity and telecommunication facilities are said to be in a good condition. In Debre Birhan town, a total of 1513 MSEs were working in various sectors including construction sector, manufacturing sector, service sector, urban agriculture sector and trade sector. MSEs were supervised and directed by the Debre Birhan Town Administration Technical and Vocational Enterprises Development Office. Based on the data we got from the Debre Birhan Town Administration Technical and Vocational Enterprises Development Office, the researchers summarized the numbers of MSEs by sector, name, number and owner.

Table 1: MSE in Debre Birhan Town

No	MSE by Sector	Total no of MSEs	Total no of Owners
1	<i>Manufacturing sector</i>	167	459
2	<i>Construction sector</i>	27	146
3	<i>Urban agriculture sector</i>	13	72
4	<i>Trade sector</i>	858	860
5	<i>Service sector</i>	448	832
	Total	1,513	2,369

3.2. Research Approach and Study Design

The research approach used in the study was quantitative approach. This is due to the fact that it is more reliable and representative to describe the nature of the problem than qualitative research approach. For the purpose of this study, a cross-sectional design was employed. The rationale to use cross-sectional design was that it allows the researchers to collect data in all variables from different samples at once, enables them to be relatively quick in making decision, and helps to include large-scale and representative samples (Cohen, 2007). Therefore, to examine determinant factors of MSEs' effectiveness, the needed data were collected using this design.

3.3. Sampling and Sampling Techniques

To get appropriate data, the researchers used probability sampling technique particularly simple random sampling. This is due to the fact that this sampling technique helps to give equal chance for all respondents to be selected and it helps to improve the accuracy of the research via collecting representative data. Quantitative data were collected from individuals (owners of MSEs) using survey questionnaire by contacting each respondent through simple random sampling technique. So as to avoid sample size related problems, the researchers limited sample size of the study through the following stated mathematical formula (Kotrlík & Higgins, 2001). This statistical formula can be applied at 95% confidence level ($X=1.96$), population proportion (50%), and $\pm 5\%$ margin of error/confidence interval. Accordingly, the researchers used this formula.

$$n_0 = \frac{t^2 pq}{d^2}$$

Where, n_0 = the required numbers of sample, t = the desired confidence level, d = acceptable margin of error/precision/confidence interval, p = estimated variability/proportion of the population and $q=1-P$. Hence, the researchers used 95% confidence level ($X=1.96$), population proportion (50%), and $\pm 5\%$ margin of error/confidence interval. Then,

$$n_0 = \frac{1.96^2 \times 0.5 \times (1-0.5)}{0.05^2} = \frac{0.9604}{0.0025} = 384.16$$

But, by adding 10% (for non-response rate) the proposed total sample size of the study of study was 423 respondents. Accordingly, from 2,369 owners of MSEs, the researchers distributed 423 survey questionnaires. During working dates, the researchers contacted respondents and distributed the survey questionnaires. Ultimately, 406 correctly filled questionnaires were successfully returned.

3.4. Variables and Measurement

Dependent Variable: The dependent variable was the status of MSEs in employment creation (effective and ineffective). To measure the status of MSEs, researchers (Berki, 2017; Rami&Ahmed, 2007) on the area recommended focusing on their profitability. Accordingly, the instrument was developed. The level of MSEs' effectiveness in employment creation was dichotomized as 'effective' and 'ineffective'. To do so, respondents were asked five questions to rate their profitability by choosing one of the following value which was coded as '1' for 'very poor', '2' for 'poor', '3' for 'undecided', '4' for 'good', and '5' 'very good'. To obtain a summary of MSEs' effectiveness in employment creation, the researchers coded as (0, 1) binary variable, where category 0 represents relatively ineffective and category 1 represents relatively effective. The mean value was used to demarcate the level of MSEs' ineffectiveness in employment creation. Accordingly, the sum value less than the

mean was categorized as relatively ineffective and the value greater than or equal to the mean was categorized as relatively effective in employment creation and coded as (0,1) respectively.

Independent Variables: The independent variables were the following listed challenges which were also defined as potential determinant factors for the status of MSEs' effectiveness in employment creation. Based on available literatures, the identified variables were: (1) politico-legal challenge which was measured by the extent of respondents' response on four items, (2) working and selling place challenge which was measured by the extent of respondents' response on three items, (3) technological challenge which was measured by the extent of respondents' response on two items, (4) infrastructural challenge which was measured by the extent of respondents' response on four items, (5) marketing challenge which was measured by the extent of respondents' response on four items, (6) financial challenge which was measured by the extent of respondents' response on four items, (7) input challenges which was measured by the extent of respondents' response on two items, and (8) entrepreneurial skill which was measured by the extent of respondents' response on four items. These challenges and items were identified based on existing literatures (Alemtsehay & Hirut, 2016; G'mariam, 2010; Gebreyohannes, 2015; Kidane, Mulugeta, Adera, Yimmam, & Molla, 2015; Weldegbriel, 2012). To obtain a summary of each challenge, the researchers coded them as (0, 1) binary variable where category 0 represents no (which were not facing the challenge) and category 1 represents yes (which were facing the challenge). The mean value was used to categorize the challenges that potentially affect the level of MSEs in employment creation. Accordingly, for each challenge, the sum value less than the mean was categorized as no and the value greater than or equal to the mean was categorized as yes and coded (0,1) respectively.

3.5. Methods of Data Analysis

After the collected data were checked, the collected data were analyzed in four levels. Firstly, the univariate/descriptive statistics was used to summarize the background characteristics of respondents using frequency and percentages. Secondly, the bivariate analysis was done using the chi-square test ($p < 0.05$) to identify determinant variables that were significantly associated with ineffectiveness of MSEs in employment creation. Finally, logistic regression analysis of the determinants of ineffectiveness of MSEs in employment creation was carried out using binary logistic regression because the dependent variable (the status of MSEs in employment creation) was dichotomized as 'effective' and 'ineffective'. This is due to the fact that binary logistic regression is only applied in cases where the dependent variable is dichotomous (Hosmer, Lemeshow, & Sturdivant, 2013; Muchabaiwa, 2013). For binary logistic regression analyses, statistical inferences were made on the basis of estimates of the odds ratio (OR) with 95% confidence level and 5% margin of error or p-value less than 0.05. The study used unadjusted odds ratio to estimate the gross effect of each independent variable on the outcome variable.

Prior to conducting the actual study, reliability and validity of the instrument was checked in pilot study. For the purpose of securing reliability, the instrument was piloted with 24 respondents. In this study, the Cronbach Alpha coefficient value was 0.75 and had high reliability. In the actual study, the alpha Cronbach's value was 0.81. It indicated that the instrument was reliable. To ensure the validity of the instrument, the researchers' colleagues evaluated the drafted instrument for the pilot study. The aim was to discard and rephrase vague statements from the developed instrument. Then after, to assess the validity of the instrument from the view point of respondents, the researchers also administered the instruments to respondents of the pilot study.

4. Results

4.1. Background Characteristics of Respondents

Table 2: Background Characteristics of Respondents (n=406)

Background Characteristics		Frequency	Percent
Sex	Male	223	54.9%
	Female	183	45.1%
Age	15-29 years	192	47.3%
	30-49 years	165	40.6%
	50-65 years	31	7.6%
	Above 65 years	18	4.4%
Marital status	Single	181	44.6%
	Married	195	48.0%
	Divorce	22	5.4%
	Widowed	8	2.0%
Educational level	Secondary and below	57	14.0%
	Certificate	134	33.0%
	Diploma	101	24.9%
	degree and Above	114	28.1%
Ownership Structure	sole proprietorship	233	57.4%
Sector name of Enterprise	Cooperatives	116	28.6%
	Partnership	57	14.0%
Sources of Capital	Manufacturing	98	24.1%
	Construction	90	22.2%
	Urban agriculture	36	8.9%
	Trade	61	15.0%
	Service	121	29.8%
Sources of Capital	Members' contribution	156	38.4%
	Members' contribution and loan	166	40.9%
	Government Loan	37	9.1%
	Friends and relatives	47	11.6%

As it is shown in Table 2, the total number of respondents who participated in this study was 406. Among them, the majority (54.9%) were males, while the remaining 45.1% were females. In regard to age category of respondents, the data were collected from four categorized age groups. Of them, the relative majority were found to be between the age of 15-29(47.3%) and 30-49(40.6%). The remaining age groups such as 50-65 years, and 65 years and above were represented by 7.6% and 4.4% respectively. About marital status of participants, 44.6% were single, 48% were married, 5.4% were divorced, and the rest 2% were widowed. Regarding to educational status of respondents, when the relative majority (33.0%) were certificate holder, and those who account 24.9% were diploma graduates. The rest 14.0% and 28.1% represent secondary and below, and degree and above respectively.

The description of respondents' background based on ownership structure for this study reveals that the majority (57.4%) of MSEs were owned by sole proprietorship. Whereas the shares of cooperatives were 28.6% and partnerships were 14.0%. In this study, the distribution of MSEs based on sectorial decomposition was 24.1% from the manufacturing sector, 22.2% from the construction sector, 8.9% from urban agriculture sector, 15.0% from trade sector, and 29.8% from service sector. Financial sources of MSEs to start their business were from members' contribution and loan (40.9%), members' contribution only (38.4%), loan (9.1%), and friends and relatives (11.6%).

4.2. The Levels of MSEs' Effectiveness in Employment Creation

Table 3: Descriptive statistics about the level of MSEs' effectiveness in employment creation (n=406)

Level of MSEs' effectiveness	Frequency	Percent
Ineffective	231	56.9%
Effective	175	43.1%

As Table 3 had shown that the majority (56.9%) of MSEs were ineffective, whereas the rest 43.1% of MSEs were effective in employment creation. However, before we proceed to identifying the determinant variables of MSEs' effectiveness in employment creation, we used bivariate analysis to examine a statistically significance difference of independent variables with MSEs' ineffectiveness in employment creation.

4.3. Determinants of MSEs' Effectiveness in Employment Creation

Table 4: Bivariate Analysis of MSEs' Effectiveness in Employment Creation by its Determinant (N=406)

Determinant Variables		Level of MSEs Effectiveness in employment creation			P-value
		Ineffective (N=231)	Effective (N=175)	Total (N=406)	
Politico-Legal Challenge	No	170(74.6%)	58(25.4%)	228(100%)	.000
	Yes	61(34.3%)	117(65.7%)	178(100%)	
Working and selling place challenge	No	136(56.4%)	105(43.6%)	241(100%)	.819
	Yes	95(57.6%)	70(42.4%)	165(100%)	
Technological challenge	No	109(47.6%)	120(52.4%)	229(100%)	.000
	Yes	122(68.9%)	55(31.1%)	177(100%)	
Infrastructural challenge	No	151(56.3%)	117(43.7%)	268(100%)	.754
	Yes	80(58.0%)	58(42.0%)	138(100%)	
Marketing challenge	No	159(77.6%)	46(22.4%)	205(100%)	.000
	Yes	72(35.8%)	129(64.2%)	201(100%)	
Financial issue challenge	No	120(70.6%)	50(29.4%)	170(100%)	.000
	Yes	111(47.0%)	125(53.0%)	236(100%)	
Input challenge	No	177(55.8%)	140(44.2%)	317(100%)	.415
	Yes	54(60.7%)	35(39.3%)	89(100%)	
Entrepreneurial skill challenges	No	135(59.5%)	92(40.5%)	227(100%)	.238
	Yes	96(53.6%)	83(46.4%)	179(100%)	

Notes: P = Probability of significant associations (Pearson's Chi-square)

The Bivariate analysis of MSEs' ineffectiveness in employment creation with determinant variables in Table 4 disclosed that four variables such as politico-legal, technological, marketing, and financial challenges were statistically associated with ineffectiveness of MSEs in employment creation ($P < 0.001$). The majority (57.6%) of MSEs which faced working and selling place challenge were ineffective in employment creation. The majority (68.9%) of MSEs which experienced technological challenge were ineffective in employment creation, while the rest 31.1% of MSEs were effective ($P < 0.001$). The performances of MSEs which experienced (56.3%) and not experienced (58.0%) infrastructural challenge were ineffective in employment creation ($P > 0.05$). The majority (64.2%) among MSEs which experienced marketing challenge were effective in employment creation ($P < 0.001$). Among MSEs which experienced financial challenges, 47% of MSEs were ineffective in employment creation, while 29.4% of MSEs which inexperienced financial challenges were effective ($P < 0.001$). The majority (60.7%) of MSEs which faced input challenge were ineffective in employment creation ($P > 0.05$). MSEs which experienced (53.6%) and inexperienced (59.5%) entrepreneurial challenges were ineffective in employment creation ($P > 0.05$). However, since Table 3 fails to disclose probability of significant associations of each variable with their reference category, the study tried to examine it using univariable and multivariable binary logistic regression towards MSEs' ineffectiveness in the next table (Table 3). It helps to clearly identify the contributing variables for the ineffectiveness of MSEs in employment creation.

Table 5: Logistic regression analysis of the determinants of MSEs' ineffectiveness in employment creation

Determinant Variables	MSEs Ineffectiveness in Employment Creation	
	COR (95%: CI)	COR (95%: CI)
Politico-Legal challenge	No® 1	1
	Yes 5.622(3.658,8.640)***	4.866(2.389,9.910)***
Working and selling space challenge	No® 1	1
	Yes .954(.640,1.424)	1.022(.466,2.239)
Technological challenge	No® 1	1
	Yes .409(.272,.617)***	.425(.169,1.070)
Infrastructural challenge	No® 1	1
	Yes .936(.618,1.417)	1.958(1.029,3.725)*
Marketing challenge	No® 1	1
	Yes 6.193(4.001,9.585)***	4.265(1.729,10.525)**
Financial challenge	No® 1	1
	Yes 2.703(1.781,4.103)***	2.569(1.527,4.321)***
Input challenge	No® 1	1
	Yes .819(.507,1.324)	2.074(.951,4.523)
Entrepreneurial skill challenge	No® 1	1
	Yes 1.269(.854,1.884)	1.142(.694,1.880)

Notes: * $P = 0.05-0.01$; ** $P = 0.01-0.001$; *** $P < 0.001$, ®=reference category, AOR=Adjusted Odds Ratio, COR=Crud Odd Ratio, CI=Confidence Interval, OR=Odds Ratio, S.E=Standard Error

In order to identify the determinant variables of levels of MSEs' status in employment creation, the researchers used binary logistic regression. In binary logistic regression, the Hosmer-Lemeshow test is the best indicator of an overall goodness of fit of the model, but to be accepted its minimum p-value must be 0.051 (Hosmer and Lemeshow, 2000). When the Hosmer-Lemeshow test value increases, an overall goodness of fit of the model becomes more credible. Thus, since this study's Hosmer-Lemeshow test value was 1.34, the model to this study was well suited.

Table 5 indicated the logistic regression analysis of the determinants of MSEs' ineffectiveness in employment creation in Debre Birhan town. MSEs which experienced politico-legal challenges were 4.866 times more likely ineffective than those which were inexperienced with the challenge (AOR=4.866; 95%CI:2.389,9.910). Regarding to working and selling place as well as technological challenges, the study found insignificant difference for the ineffectiveness of MSEs in employment creation. MSEs with infrastructural challenges were 1.958 times more likely ineffective in employment creation than MSEs which did not experience the challenge (AOR=1.958; 95%CI:1.029,3.725). The odds of MSEs ineffectiveness increased 4.265 times for MSEs which experienced marketing challenges than those which inexperienced marketing challenges (AOR=4.265; 95%CI:1.729,10.525). About financial challenges, MSEs which were inexperienced with financial challenge were 2.569 times ineffective in employment creation (AOR=2.569; 95%CI:1.527,4.321). Both input and entrepreneurial skill challenges were insignificantly associated with the ineffectiveness of MSEs in employment creation.

5. Discussion

This study finding revealed that the majority (56.9%) of MSEs were ineffective in employment creation, whereas the rest (43.1%) of MSEs were effective. In line with this, the study focused on 'growth of youth-owned MSEs in Ethiopia' in general and found the presence of lower growth rate of MSEs (Amha, 2015). Besides, a study completed by Gelgelu revealed the gradual decrement of MSEs in Wolkite town, Ethiopia (Gelgelu, 2018). Similarly, the finding of a study conducted outside Ethiopia also reported that 'the high failure rate of MSEs in Ghana is alarming' (Yeboah, 2021). However, it was inconsistent with the study done by Bereket (2010). For this conflict of findings, the possible justification might be due to the fact that Bereket used relatively less samples and examined merely three sectors of MSEs namely manufacturing, construction and service sectors.

About the determinants of MSEs' ineffectiveness in employment creation, the finding disclosed that MSEs with politico-legal challenges were more likely to become ineffective. This finding was supported by previous studies' findings which concluded that politico-legal challenges like petty corruption (Berki, 2017), government policy (Deyganto, Mekonnen, & Sodano, 2018), policy and regulatory bottlenecks (Ejigayehu, 2017; Tarfasa, Ferede, Kebede, & Behailu, 2016), bureaucratic bottlenecks system (Abera, 2012) corruption, bureaucratic processes, government policy (Abdissa & Fitwi, 2016) and lack of clear and pragmatic national policy (Geremewe, 2018) had a significant effect on the performance of MSEs in Ethiopia. In Kenya, governmental policy and regulations were also one of the determinant factors of MSE's ineffectiveness (Kamunge, Njeru, & Tirimba, 2014). Still it goes in line with qualitative studies (Altenburg & Von Drachenfels, 2006; Muturi, 2015) which explain the adverse effects of political and legal-related factors to the effectiveness of MSEs in employment creation.

The study revealed insignificant association of working and selling space and MSEs' performance in employment creation. Nevertheless, other studies (Abeiy, 2017; Abera, 2012) found lack of working premises as determinant factor for MSEs' failure. The possible justification for this conflict of findings might be associated with accessing working and selling places in a capital city might not be easy as in rural towns. Working places in large/

capital cities were too limited than any other place. (Ergo & Woldekidan, 2018) also found that for expansion and sustainability of MSEs in Wolaita and Dawro Zones, inadequate working places was one of the problems. Still for findings' inconsistency, the dissimilarity of geographic location might matter. As scholars (Kefale & Chinnan, 2012) conclude, high house rent and inappropriate place that probably vary from place to place were serious impediments for the effectiveness of MSEs.

Numerous local studies (Abdissa & Fitwi, 2016; Abera, 2012; Berki, 2017; Ergo & Woldekidan, 2018; Gelgelu, 2018; Geremewe, 2018; Kefale & Chinnan, 2012) confirm that the performance and growth of MSEs was challenged by inadequate infrastructural facility. Similarly, this study confirms that MSEs which do not face infrastructural challenges were more likely to be effective in employment creation than MSEs which do faced the challenge. The result also agrees with the other study (Grimm & Paffhausen, 2013) which concludes that the existence of infrastructure challenges like insufficient quality of public services such as electricity, road, water, sewerage and telecommunication services adversely contributed for MSEs' effectiveness.

Many studies (Abera, 2012; Berki, 2017; Deyganto et al., 2018; Ergo & Woldekidan, 2018; Geremewe, 2018; Tarfasa et al., 2016) revealed positive correlation of level of MSEs' ineffectiveness with marketing challenges. Moreover, this study finding was consistent with other studies (Garoma, 2012; Reeg, 2015) that concluded marketing challenge as a problem of MSEs.

MSEs which experienced financial challenge were ineffective than those which didn't. In this regards, (Geremewe, 2018) concludes that lack of access to finance, lack of access to capital, inefficient financial market, high interest rates for borrowing and lack of credit facilities were major financial-related factors which encountered MSEs. Similarly, the existence of limited access of finance for MSEs was also identified by many researchers (Abdissa & Fitwi, 2016; Abebaw, Mulate, & Nigussie, 2018; Abera, 2012; Deyganto et al., 2018; Ergo & Woldekidan, 2018; Tarfasa et al., 2016).

The study found the insignificant effect of technological challenge. Consistently, studies (Abebaw et al., 2018; Ergo & Woldekidan, 2018) also found insignificant effect of technology on the performance of MSEs in North Shewa Zone which goes in line with this study's finding. However, other studies that focused on 'textile and garment, food processing and wood and metal work sectors' (Abera, 2012) and that took their majority (75%) sample from 'manufacturing sectors' (Ejigayehu, 2017) found significant effects. The probable justification is that the sector of MSEs which these two researchers gave attention was specific and needed more technology-based knowledge than others sectors like urban agriculture and trade.

Irregular and erratic supplies of raw materials were obstacles for MSEs; and this was especially more common for small-scale manufacturing industries. (Drbie & Kassahun, 2013) also expound that the development of MSEs was challenged by the erratic supply of raw materials. Inconsistently, this study found no significant effects of input challenges on the performance of MSEs in employment creation. The justification for the dissimilarity of this finding with others could be that input challenges particularly electric power supply across the country are recently in positive progress than ever before.

Although the study finding uncovered that the effectiveness of MSEs in employment creation and entrepreneurial-related skill challenge had insignificant association, other studies (Abera, 2012; Berki, 2017; Ergo & Woldekidan, 2018; Geremewe, 2018) conclude

that entrepreneurial-related skill challenges affect MSEs. Since, in the descriptive analysis, this study had shown that from the total of 231 MSEs, the majorities (135) were ineffective and the possible reason for this divergence of findings might be due to the fact that the other researchers have used descriptive statistics as methodology.

6. Conclusion and Recommendation

The role of MSEs in employment creation is paramount albeit their important role is highly affected by certain challenging determinant factors. As it is endorsed by several researchers the challenges faced by MSEs were not constant from place to place. In other words, since the nature of such challenges lacks uniformity among countries, the performance and working environment of MSEs vary from country to country. Thus, this study focused on assessing the level of effectiveness of MSEs in employment creation and their determinants in Debre Birhan town. Accordingly, the finding revealed that the majority of MSEs were ineffective in employment creation. With regard to this ineffectiveness of MSEs in employment creation, the study found the following four determinant factors. These were politico-legal, infrastructural, marketing, and financial challenges. Other challenges including working and selling space, technological, input and entrepreneurial skill-related challenges had insignificant effects though these were also the main determinants in other areas.

Hence, both local and regional government bodies shall reconsider their legal and bureaucratic procedures. Similarly, non-governmental organizations are expected to lobby the government until the working environment for MSEs is safe. This is important to address all challenges. Still, both Debre Birhan University, and Debre Birhan Town Administration Technical and Vocational Enterprises Development Office shall create marketing chain for MSEs that operate in the town. Amhara credit and saving institution shall allocate ample financial funds for MSEs which need additional finance to expand their businesses. Based on the needs of MSEs, addressing infrastructural challenges making MSEs more effective in employment creation is also expected from Debre Birhan Town Administration. Additionally, the study recommends researchers to investigate why these challenges have become challenging factors in the study area. Furthermore, all stakeholders shall invest their resources in addressing marketing, financial and infrastructural challenges. However, if their resource is too limited in addressing these challenges at a time, it is advisable giving priority to the first challenge then to the last. In other words, while it might not be practical in other study areas, addressing the aforementioned challenges step by step is the main recommendation of this study in the study area.

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Ethics approval and consent to participants

The researchers first asked for the participants' willingness by explaining about the purpose of the study and introducing about who the researchers are. Next to this, the researchers contacted the voluntary participants or respondents by developing confidentiality. No study participant was included to this study without obtaining his/her informed consent orally. Participants were also given the right to interrupt the interview process at any time when they feel discomfort. Besides, to protect participants' personal identity, anonymity was safeguarded.

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