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Determinants of Women Entrepreneurs Business Performance: Evidence from Micro and Small Scale Enterprises in Arba Minch Town, Southern Ethiopia

Mr. Karo Algasse
Lecturer of Management, College of Business and Economics, Arbaminch University, Ethiopia
Email: karoalgasse@gmail.com

Dr. Edward Lambert
Academic Dean, School of Business and Economics, Atlantic International University, USA
Email: edward@aiu.edu

Dr. Kanbiro Orkaido*
Academic Advisor, School of Business and Economics, Atlantic International University, USA
Email: kanbiro.orkaido@gmail.com, ORCID: https://orcid.org/0000-0001-8412-1990
*Corresponding author: Kanbiro Orkaido Deyganto

Abstract
Women's business performance is influenced by individual, legal, economic and technological factors. Thus, the purpose of this study was to identify determinants of women's business performance with reference to MSEs in Arba Minch town. In order to achieve this objective, the researcher has used explanatory research design with quantitative research approach in which six hypotheses have been tested. Primary data has been collected from 281women entrepreneurs who selected using stratified and simple random sampling technique by using structured questionnaires. Both descriptive and inferential statistics has been used to analyze the data through SPSS version 21.0. According to the finding of the study the descriptive result of the study indicates that variables such as access to technology, access to land premise, communication skill and tax amount has moderate/medium mean because the mean score of the variables is ranges from 2.60 to 3.39 (average value). In other way, two remaining variables such as access to finance and lack of training has low mean because the mean score of the variables is ranges from 1.80 to 2.59 (low value of mean). Based on the Pearson correlation coefficient analysis of the study lack of training and increase in tax amount have negative and significant relationship with the business performance of women entrepreneurs whereas the rest variables such as access to finance, access to land premise, access to technology and communication skill has positive and significant relationship with the women business performance of the MSEs in Arbaminch Town. According to the multiple regressions analysis of the study access to land was the best predictor of women business performance and lack of training was the least predictor of women business performance.
Keywords: Women Entrepreneurs, Business Performance, Determinants, Micro and Small Scale Enterprise, Multiple regressions.
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1. INTRODUCTION

Business performance of women entrepreneurs are crucial subject that will leverage their business goals and end in success. Getu (2015) defined performance as an overall activities and operations performed by women entrepreneurs in MSEs in strengthening their enterprises.Women in developing countries have movements and women's income generation programs have traditionally taken a broad–based welfare approach which has emphasized improving women's general living standards rather than enhancing their independence and active participation in the main stream of the economy.The dramatic expansion of scholarly interest and activity in the field of women's entrepreneurship within recent years has done much to correct the historical inattention paid to female entrepreneurs and their initiatives. Yet, as the field continues to develop and mature, there are increasingly strong calls for scholars to take their research in new directions (Karen et al, 2012).

Women entrepreneurs are key human capital of promoting economic growth of developing countries transitional economic status.This is why women entrepreneurships are increasingly recognized as an important driver of economic growth, productivity, innovation and employment, and it is widely accepted as a key aspect of economic energy for developing countries like Ethiopia. In recent years, support programs for women entrepreneurs have gained traction and prominence as a means to create jobs and boost productivity at the national and regional levels. However, disparities in initial resource endowments of male—and female-led firms, sector sorting into low productivity activities, social norms, and institutional arrangements, constrain the growth

(performance) of female-led enterprises due to different legal, economic and personal/individual factors (World Bank, 2014).

According to Fesseha (2017) women MSEs Play an important role in creating employment opportunities mainly for the urban youth and women, serve as an engine to transform economies from agricultural-led to industrial led, and are considered the best mechanisms by which citizens accumulate capital and empower women economically. However, in developing countries like Ethiopia, female entrepreneurs are facing various challenges in their day-to-day lives just because of their gender. Financial problems, inadequacy of infrastructural facilities like land premise are among the problems they face. Hence, studying the role of women entrepreneurs' in economic development is an issue that have attracted the interest of different researchers in earlier years but it is less meaningful without identifying the determinants of women entrepreneurs performance who registered as ' micro and small scale enterprise (MSEs).

As a result, many studies have been conducted on the topic in other countries outside Ethiopia. For instance, empirical studies that have been conducted by Muli Emmanuel Kyalo,(2016); Juliana Anyango, (2015); Ezilda and David, (2017);, Isidore et al, (2011); Nasima, (2014);, Tatiana and Galina, (2010), ; Afzal et al, (2018), Caroline, (2017); Fridah, (2017); Farah, (2014), Alsen and Calkin, (2017), Getamesay(2017) and Maziku, et al., (2014) revealed that lack of training, lack of land primes, access to finance, lack of access to technological resources were determinants of women MSE performance.

Out of researches reviewed above, only (Maziku et al., 2014) and Getamesay(2017) used binary logistic regression model and found out that lack of training, lack of land primes, access to finance, lack of access to technological resources were determinants of women MSE performance. However, using logit model is not scientifically recommended for measuring business performance since it is continuous variable that should be measured through Likert scale and analyzed by means of multiple linear regression models.

On other hand Tatiana and Galina (2010) and Afzal et al, (2018) were employed the multiple linear regression model to measure the determinants of women MSEs' performance respectively. The current study was similar to (Tatiana and Galina, 2010) and (Afzal, et al, 2018) in using the multiple linear regression model but incorporating more one explanatory variables such as communication skill, in which they are not incorporated/ involved in their study as determinants of women MSE business performance in the study area by measuring performance of women business through non-financial indicators..

When it comes to Ethiopia, few researchers have conducted their study on the same topic in different areas of the country and reached on their own conclusion. For instance, Mulugeta, (2010), Zinash (2014); Jemal (2013), Fesseha (2017), Getamesay (2017), Getu (2015), Zinashbizu (2017) used the descriptive statistics and found that lack of own premises(land), financial access, inadequate access to training, access to technology and, increase in tax amount, in the areas of business were the key social, economic and individual factors that affect the performance of women entrepreneurs in MSEs in different town and sectors of the country.

However, the present research is different from that of Mulugeta, (2010); Zinash (2014); Jemal (2013); Getu (2015); Zinashbizu (2017) and Fesseha (2017) by adding more additional variable (communication skill) as a determinant and employing multiple linear regression model to predict the impact of explanatory variables on women MSEs Business performance (response variable) in Araba Minch town more scientifically than mere description of the existing scenario.

As far as the researcher's knowledge and internet browse is concerned, there is no research conducted on the factors affecting women micro and small scale enterprise performance in Arba Minch town. Hence, undertaking this research in Arba Minch town then help to specifically know the determinants of women MSE business performance and take appropriate action in reducing problems related to women business performance and can be also used as an input for policy formulation with regarding the issue of women business performance. Besides, there is time gap from different studies reviewed above since the contribution of each explanatory variable on response (dependent) variable changes from time to time due to change in economy, politics, social life, and technology and individual attitudes from time to time all over the globe. Thus, the above-mentioned problem necessitates the present study to carry out. To that end, the objective of this study is to identify the determinants of women business performance by filling the above-mentioned time, variable incorporation and methodological gaps.

1.1 Objectives of the study

The overall objective of the study is to analyze the determinants of women entrepreneurs' business performance in micro and small-scale enterprises in Arba Minch town, southern Ethiopia.

Based on the general objective, the specific objectives of the study are identified as follows:

1. To examine the effect of economic factors (access to finance and land promise) on the business performance of women small-scale enterprise in Arba Mich Town.
2. To examine the effect technological factors on business performance of women MSEs
3. To investigate the effect of individual factors (communication skill and training) on business performance of

women small-scale enterprise in Arba Mich Town.

4. To identifying the effect of legal and administrative related factors (Increase in tax amount) on business performance of women small-scale enterprise in Arba Mich Town.

1.2 Research Hypothesis

Based on the general objective and the specific objectives of the study that stated by the researcher after thoroughly reviewing the related literature, it has expected that:

H1: There is a significant relationship between access to finance and women business performance.
H2: There is a significant and positive relationship between access to land premise and women business performance.
H3: Technological resources has positive influence on performance of women entrepreneurs MSEs
H4: There is a significant and positive relationship between communication skill and women SMEs performance.
H5: Lack of Training has negative and significant influence on women business performance.
H6: There is a negative and significant relationship between Increase in tax amount and women SMEs performance.

2. Determinants of Women Entrepreneurs Business Performance

Business performance and women Entrepreneurs:

The performance of women entrepreneurs in their businesses has become an important area of recent policy and academic debate. Comparatively little rigorous and in-depth research, however, has been undertaken on the issues of gender and business performance, Woo and Cooper (1994) defined performance as the act of performing or doing something successfully; using knowledge as distinguished from merely possessing it. However, performance seems to be conceptualized, operationalized and measured in different ways, making cross- cultural comparison difficult.

Women business owners face different difficulties when they run business. According to Getu (2015) he found out that lack of their own premises (land) to run their business, financial access given by micro finances or other lending institutions, inadequate access to business training andaccess to technology were the major factors that deter the performance of women entrepreneurs in MSEs. To add, legal and administrative bodies are required to create an enabling environment for the growth and development of MSEs, but his study found that high amount of tax and over all legal and regulatory environments were the main factors that hampers women entrepreneurs' business performance. His study also found that customer service training, marketing training, financial report training and entrepreneurship trainings were the main challenges of the entrepreneurs.

The study undertaken by Tadesse(2016) also revealed that tax levied on the business, lack of entrepreneurship training, technology expensiveness and shortage of working capital need more attention by micro and small enterprise development office and other stakeholders since they were main factors that hinders the growth of women-owned micro and small enterprises whereas land premises, training at the beginning of the business, loan facility,were the opportunities for women entrepreneurs in Assela town. Furthermore Zinash (2014) found that lack of own premises (land), financial access, inadequate access to training and lack of access to technology detersperformance of women entrepreneurs. The major determinants of business performance of women entrepreneurs were classified as economic, individual, legal and administrative factors.

Economic Factors

1. Access to finance (ATF)

Finance is the life blood of every business enterprises that determines the success and failure of business. Consequently as per Getamesay(2017) research result that was conducted in Debre Markos town inadequacy of credit institutions, high collateral requirement for banks and other lending institutions, high interest requirement for banks and other lending institution were the variables thatstatistically significant and have influence on women entrepreneurs' business performance.

The financial aspects of setting up an enterprise are without misgiving the most significant barriers to women (Zororo, 2011). Women entrepreneurs find it difficult to increase the start-up capital and addition investment for expanding their existing business. Financial resources are the back bone for any business to start and run. To this effect the study conducted by Gitonga (2016) found that access to financial resources have great effect on performance of female owned enterprises. Also Juliana (2015) in his study found that shortage of financial assets such as access to finance contributes to negative performance of women entrepreneurs in MSEs. Additionally studies undertaken by (Kanbiro and Addisu, 2018) found out that access to finance has positive influence on success of micro and small-scale enterprises and (Kanbiro et al., 2018) in his study on the same topic suggested that access to finance has positive and significant influence on business performance MSEs in Konso, Karat town and Tabor sub-city Hawassa. In opposite way Caroline & Fridah,(2017), Zinash (2014), Jemal (2013) and Getu (2015) study, results indicated that inadequate capital due to lack of access to credit facilities were the main factor that affecting the growth of women owned SMEs. Hence, it is hypothesized as **H1:** There is a significant relationship between access to finance and women business performance

2. Land premise facility :

Having sufficient land facility in establishing the business will have positive influence on business performance of women**.** Therefore, (Isadore et al. (2011), Zinash (2014), Jemal (2013) and Getu (2015) found out that lack of sufficient operational land premise has negative influence on business performance of women in micro and small scale enterprises. From among others Jemal (2013) uniquely found that the majority of women entrepreneurs have experienced difficulties in finding and acquiring land premises for production or provision of services, as well as for selling purposes. Most run their businesses from rented premises, but the relatively high rents pose critical problems for them and can hinder their expansion and diversification. Hence, in this research it can be tentatively stated as **H2:** *access to land premise has positive influence on women business performance.*

3. Access to technological resources (ATR)

Technological resources are very important determinants that influence the performance of women entrepreneurs in micro and small scale enterprises. Accordingly the finding of Getamesay (2017) study in Debre Markos Town on the same topic reveals that high cost to acquire new technology, lack of skill to adopt new technology were the major factor that are statistically significant and have influence on women entrepreneurs' business performance.

It is virtually not possible for an enterprise to exist without technological resources such as computers, telephones access to internet and e-mail (Afzal et al., 2018). The study revealed that entrepreneurship is closely associated with responsiveness and innovation, Technological change is influenced the entrepreneurial decision (Schutte and Barkhuizen, 2014). Women lack utile technology and related amenities that affect their success in developing countries (Zewde and Associates, 2002). Women entrepreneurs that accepted a part of their study made no use of the information technology (Dechant and Al-Lamky, 2005). In a marketplace where the rivalry is too high, they have to fight difficult to survive in the market against the coordinated sector and their male counterpart who have immense experience and capacity to adopt advanced technology in managing enterprises. Women entrepreneurs work to flow technology in the process of manufacturing (Sharma, 2013). Technological resources – it is virtually not possible for an enterprise to exist without technological resources such as computers, telephones access to internet and e-mail. The company is manufacturing a particular high-tech'product, technological know-how will be significant. The primary resource will be engineers and the designs created (Bygrave, 2008). The company is manufacturing a particular high -tech'product, technological expertise will be significant. It can be considered as continuous variable that can be measured on continuous scale. **H3:** *There is a significant and positive relationship between access to technological resources and women business performance.*

4. Communication and Communication Skills

Here in this study context communication is the interaction between the business owners and their respective customers which boosts performance of the business at large. To this end, according to Seyyedeh (2013) communication skill of enterprise owners/managers with their employees/customers have a significant positive impact on the job performance of the enterprises.

H4: Therefore depending on the information or literature review tentatively can be hypothesized as communication skill has positive impact on business performance of women entrepreneurs.

5. Lack of Training (LT):

Lack of sufficient training for women is a barrier to women involvement in entrepreneurial activities. Non-availability of the training program and technical support are affected women entrepreneurs (Afroze *et al.*, 2014). Training session for women entrepreneurs on formal business management skills such as marketing, human resource management, record management, and problem solving and planning is so vital to run their business. To that end Gitonga found that training have a positive impact on the performance of female entrepreneurs enterprises. Contrarily according to Andualem&Agarwal (2016)training support has no significant impact on the success of MSEs at Arbaminch. Tatiana and Galina (2010) conducted the study on gender differences in efficiency-driven countries based on the GEM data through correlation and regression analyses. An important finding of their study was that training on starting a new business as a common factor, has a greater influence on female entrepreneurial activity. Therefore, training should be considered an essential issue when designing government policies and stimulating entrepreneurial activity in general, particularly women. Contrary to this Gitonga (2016) found that training has a least effect on the performance of women entrepreneurs. Therefore tentatively the current study states the following hypothesis **H5**: *Lack of training has significant and negative influence on performance of women entrepreneurs.*

6. Increase in Tax amount (ITA)

There are many laws and regulations in developing countries that women found them hard to obey with and they avert them from conducting an enterprise (Marcellina et al., 2002). Women entrepreneurs depict that taxation and regulations obstacles can play as significant constraints for women entrepreneurs and involve of their self-enterprise. The lack of government assistance regarding policy, law and services has been recognized as an obstacle for women entrepreneurs (Vossenberg, 2013), (Zinash (2014); (Jemal, 2013) and (Getu, 2015) (Kanbiro et al., 2018) found out that increase in tax amount of the country towards women micro and small scale are negatively related with their performance. **H6** *There is a significant negative relationship between increase in tax*

amount and women SMEs performance.

2.1 Conceptual Frame work of the study

The conceptual framework is developed based on the independent variables economic, individual, legal & administrative related factors and technological factor in the rectangle at the left side has significant impact on dependent variable (business performance) in the rectangle at right side as follow:

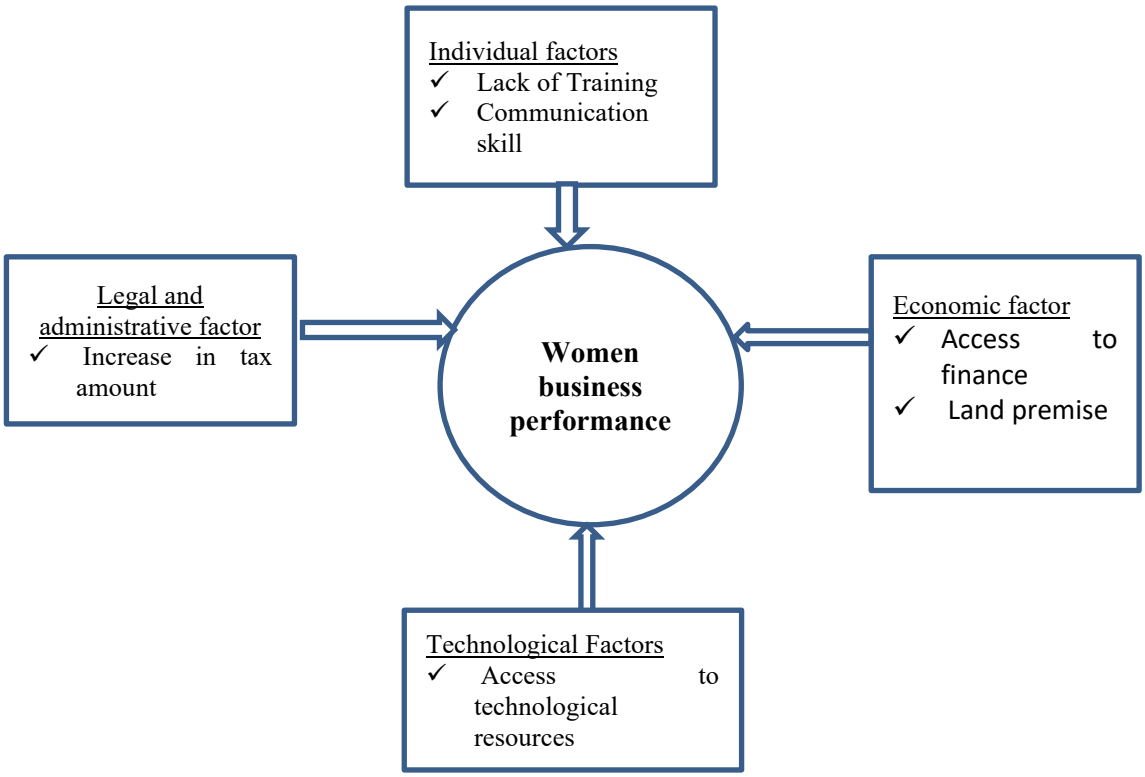

Figure 1 Conceptual Framework of the Study
Source: Own Construct (2019)

3. METHODOLOGY EMPLOYED

3.1 Research Design& Approach

When the purpose of research is to explain and know why something occurs, it is explanatory research (Abiy etal, 2009). In this research the researcher has been employed explanatory because, the objective of the study was to test and explain hypotheses about the effect of independent variables on business performance (response variable).

There are three research approaches. These are quantitative, qualitative research and mixed approaches. Quantitative research is an approach for testing objective theories by examining the relationship among variables. These variables, in turn, can be measured, typically on instruments, so that numbered data can be analyzed using statistical procedures. Whereas Qualitative research is an approach for exploring and understanding the meaning individuals or groups ascribe to a social or human problem (Creswell, 2014). The mixed approach is the combination of both quantitative and qualitative approaches. Hence in this study the researcher employed quantitative research in which data were collected through structured questionnaire.

3.2 Data Type and Methods of Data Collections

3.2.1 Source of Data

In this research, the researcher has used both primary and secondary data. The source of primary data was respondents from Women entrepreneurs in MSEs by using stratified procedure followed by simple random sampling method. While the secondary data source was published like journals, articles, books, and thesis and other materials related to the study.

3.2.2 Methods of Data Collections

To collect primary data structured questionnaires were used and secondary data were collected through review of different published and unpublished materials that related to the topic.The questionnaires were adopted and developed with some modification from previous similar studies such as Gitonga (2016), Maziku et al (2014), Farah (2014). Close ended questionnaires were prepared in the form of Likert-scale.

3.3 Participants of the Study

According to Micro and small scale 2019 annual report there are 531, 732, 185, 421, and 114 women micro and small scale enterprises in manufacturing, service, trade, construction and urban agriculture respectively, aggregately which equals 1983. These are considered as study population.

3.4 Sampling techniques and sample size of the study

To take the sample from total population of 1983 women micro and small scale enterprises. The researcher used stratified method of taking sample from the total population under study. In this study, the researcher considered five types of business sector as strata then the researcher used the scientific formula of Yamane. T, (1967) to determine the sample under thestudy, that

$n = \boldsymbol{n} = \frac{N}{1+N(e)^2}$ *where* $n = sample\ size,\ N = total\ population\ and\ e =$ *sample error that can applied by researcher as* $333 = \boldsymbol{n} = \frac{1983}{1+1983(0.05)^2}$ Then, the researcher used stratified sampling technique to select specific sample from each business sectors.This is calculated by (Israel, 1992)

$nh = (Nh/Ns) * n$ Where, nh = sample size from each sector, Nh = total population in each sector, Ns = target population and n = sample size from target population.

Table 3.1 Determination of sample size from each stratum by applying formula

Business sectors	Population of strata	Sample size Calculations	Sample size from each sector
Service	732	(732/1983) *333	123
Manufacturing	531	531/1983) *333	89
Trading	185	185/1983) *333	31
Construction	421	(421/1983) *333	71
Urban agriculture	114	(114/1983) *333	19
Total	1983	(1983/1983) *333	333

Source: own computation (2019)

3.5 Reliability Test

To measure the consistency of the questionnaire particularly the Likert-type scale the reliability analysis is essential in reflecting the overall reliability of constructs that it is measuring. To carry out the reliability analysis, Cronbach's Alpha (α) is the most common measure of scale reliability and a value greater than 0.700 is acceptable.

Table 3.2 Reliability Test of the variables

Variables	Cronbach's Alpha	No of Items
Women Business Performance(WBP)	0.76	6
Access to Finance (ATF)	0.92	3
Access to Land premise(ATL)	0.74	3
Access to technology(ATT)	0.82	2
Communication Skill(CS)	0.85	3
Training(T)	0.88	9
Tax Amount(TA)	0.82	5

Source: Own Reliability Analysis (2019)

This indicates that all the variables under consideration accounts above the scientifically accepted threshold, therefore the study are reliable under this circumstance.

Table 3.3summary of Variables description and their scale of measurement

Variables	Symbol	Scale of measurement	Expected sign
Dependent variable			
Business performance	BP	Continuous	
Explanatory variables			
Access to finance	ATF	Continuous	(+)
Land premise	LP	Continuous	(+)
Access to technological resources	ATR	Continuous	(+)
Lack of Training	LTR	Continuous	(-)
Increase in tax amount	ITA	Continuous	(-)
Communication skill	CS	Continuous	(+)

Source: Own construct (2019)

3.5.1 Econometric model Specification

Performance is continuous random variable in its nature that could be measured through multiple Regression

Model (MLRM). A model is said to be linear when it is linear in parameters. Linear regression model can be either simple or multiple. Simple linear regression model is used when there is only one independent variable. In this research, multiple linear regression model (MLRM) Was employed because, the study variable depends on more than one explanatory or independent variables and both explanatory variables such as access to finance, access to technological resources, lack of training, increase in tax amount, land premise, and communication skill that affect women business performance} and dependent (performance) has linear relationship.

The researcher has developed the model by driving sample regression function from population regression functions. In the multiple linear regression model (OLS), the regressed (dependent variable: Business performance (BP) is a linear function of Explanatory variables including Access to finance (ATF), Land premise (LP), Access to technological resources (ATR), Lack of Training (LTT), Increase in tax amount (ITA), and communication skill (CS) are (independent variables) corresponding to the explanatory variables and a random disturbance or error. The model also has an intercept. Designating the regressed by BP, the independent variables such as ATF, LP, ATTR ……..CS. and the random disturbance- by ***u***, the population model of multiple linear regressions is given by the following expression as:

$$WBP = \beta 0 + \beta 1 * ATF + \beta 2 * LP + \beta 3 * ATTR + \cdots \beta nXn + u \ \ldots\ldots\ldots \ (3.1)$$

Whereas:
WBP= Women Entrepreneurs Business performance
β0 = Constant term
β1, β2, β3, β4, β5, and β6 refers to coefficients of independent variables
ATF= Access to finance
LP= Land premise
ATTR= Access to technological resources etc……. CS= communication skill
u= Error term

On the right hand of (3.1) we can distinguish two parts: the systematic component β0+ β1*ATF+β2*LP+β3*ATR+ and the random disturbance u. Calling μWBP to the systematic component, we can write it as:

This equation is known as the population regression function

Now, let us suppose we have a random sample of size n {ATF, LP, ATR…….CS): i =1, 2, n} extracted from the population studied. If we write the population model for all observations of the sample, the following system is obtained:

$$WBP1 = \beta 0 + \beta 1 * ATF + \beta 2 * LP + \beta 3 * ATR + \cdots \ldots \beta nXn + u1$$
$$WBP2 = \beta 0 + \beta 1 * ATF + \beta 2 * LP + \beta 3 * ATR + \cdots \ldots \beta nXn + u1 + u2$$
$$WBP3 = \beta 0 + \beta 1 * ATF + \beta 2 * LP + \beta 3 * ATR + \cdots \ldots \beta nXn + u1 + u3$$

$$WBPn = \beta 0 + \beta 1 * ATF + \beta 2 * LP + \beta 3 * ATR + \cdots \ldots \beta nXn + u1 + u3 + un \ldots\ldots (3.2)$$

If we take into account the denominations given to vectors and matrices, the model of Classical Linear Regression Model (CLRM) equation 3.3 can be expressed in the following way:

$WPB = X'\beta + u$ …….. (3.3)

Where W**BP** is a vector $n\times1$, **X** is a matrix $n\times k$, β is a vector $k\times1$ and **u** is a vector $n\times1$.

The basic idea of regression is to estimate the population parameters, β_1, β_2, β_3……β_5*taken* from a given sample. The sample regression function (SRF) is the sample counterpart of the population regression function (PRF). Since the SRF is obtained for a given sample, a new sample will generate different estimates.

The SRF, which is an estimation of the PRF, is given by the following equation:

$$\widehat{WPB} = \widehat{\beta 0} + \widehat{\beta 1} * ATF + \widehat{\beta 2} * LP + \widehat{\beta 3} * ATR + \cdots \ldots \ldots \widehat{\beta nXn} + \hat{u} \ldots\ldots \ (3.4)$$

3.6 Methods of data Analysis

After accomplishment of data collection procedure, it has been classified as per each variable. In this research data, were analyzed by descriptive statistics such as maximum and minimum values, average, correlation, frequency, percentage and standard deviation and inferential statistics (Multiple regression) by the help of SPSS in order to get the reliable finding.

4 Result & Discussion

The researchers distributed three hundred thirty three (333) questionnaires. Out of the 333 questionnaires distributed, two hundred eighty one (281) questionnaires were correctly filled and returned. To this end descriptive &inferential analysis were made by correlation and multiple regressions model in which reliability, different assumptions of the model were tested and finally regression was run based on the hypothesized variables.

4.1 Summary of Descriptive Statistics

According to Karekezi and Butera (2018), the attitude or believes of an individual about an event is measured

using mean of five (5) point Likert scale responses. Strongly agree = 5 (very high mean) with mean range of 4.20-5.00, agree = 4 (high mean) with a mean range of 3.40-4.19, Not sure = 3 (average mean) with mean range of 2.60-3.39, disagree = 2 (low mean) with a mean range of 1.80-2.59 and strongly disagree = 1 (very low mean) with mean range of 1.00-1.79. Hence, the variables measured through 5 pint Likert scale were analyzed as follow:

Table 4.1 Summary of Descriptive Statistics for all Variables incorporated in the model.

	N	Mini	Maxi	SD	Mean	Interpretation of the mean
WBP	281	1.00	5.00	1.05	2.60	Average mean
ATF	281	1.00	5.00	1.15	2.19	Low mean
ATL	281	1.00	5.00	1.21	2.79	Average mean
ATTR	281	1.00	5.00	1.29	2.90	Average mean
CS	281	1.00	5.00	.99	2.98	Average mean
LTR	281	1.00	5.00	1.00	2.37	Low mean
ITA	281	1.00	5.00	1.25	2.85	Average mean

Note: 1.00 – 1.79 Very low, 1.80 – 2.59 Low, 2.60 - 3.39 Moderate, 3.40 – 4.19 High, 4.20 – 5.00 Very High.
Sources: Survey data (2019)

Women business performance (WBP) was the dependent variable of this study. As indicated in the above table 4.1, the women business performance of the sectors (WBP) shows that the sectors achieved on average a positive business performance. For the total sample, the overall mean of WBP is 2.60 which is average mean and SD=1.05 that shows scores deviates from mean by a maximum of 5 and a minimum of 1 Likert scale values. This implies that the sectors need to optimize the use of their assets to increase the women business performance.

With regard to the access to finance (ATF), the overall mean was 2.19 which is low below all mean values of other variables. This implies that, access to finance has lowest mean. The minimum and maximum values of the ATF are one and five respectively. The mean value of overall ATF deviates from its mean to both sides by1.15.

The mean of Access to Land (ATL) and Access to Technological Resources (ATTR)are 2.79 and 2.90 respectively in which both has moderate/medium mean. ATL and ATTR scores dispersed from its mean values with the standard deviation of 1.21 and 1.29 respectively. The maximum and minimum values of the size of the sectors were five and one respectively.

The average value of the Communication Skill (CS) and Tax Amount (ITA) were 2.98 and 2.850 followed by standard deviation value of 1.00 and 1.25 respectively. This implies, Communication Skill (CS) and Increase in tax amount have moderate mean. The outputs of the descriptive statistics of Lack of Training (LTR) indicate that its mean was 2.3737 and standard deviation of 1.00. This means that LT has moderate mean value with maximum value of Likert scale 5 and a minimum value of 1 respectively.

To sum up from among the variables included in this study access to finance (ATF) and lack of training (LTR) with mean of 2.1886 and 2.3737 respectively have low mean whereas the rest variables fall within the range of medium/moderate mean scale.

4.2 Pearson correlation matrix for dependent and independent variables

Table 4.2 Pearson correlation matrixes for dependent and independent variables

Variables		WBP	ATF	ATL	ATR	CS	TR	TA
WBP	Pearson Correlation	1	.489**	.584**	.237**	.305**	-.245**	.370**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
ATF	Pearson Correlation	.489**	1	.458**	.242**	-.117	.383**	.318**
	Sig. (2-tailed)	.000		.000	.000	.051	.000	.000
ATL	Pearson Correlation	.584**	.458**	1	-.345**	.048	-.320**	.691**
	Sig. (2-tailed)	.000	.000		.000	.428	.000	.000
ATR	Pearson Correlation	.237**	.242**	-.345**	1	.295**	.373**	-.289**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
CS	Pearson Correlation	.305**	-.117	.048	.295**	1	-.230**	.276**
	Sig. (2-tailed)	.000	.051	.428	.000		.000	.000
LTR	Pearson Correlation	-.245**	.383**	-.320**	.373**	-.230**	1	-.264**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
ITA	Pearson Correlation	.-370**	.318**	.691**	-.289**	.276**	-.264**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
**. Correlation is significant at the 0.01 level (2-tailed).								

Source: Survey data, 2019

The table 4.2 shows the relationship between dependent variable women business performance (WBP) and independent variables with coefficient of correlation 1 indicates that each variable is perfectly correlated with each other. The result shows that, Access to finance (ATF), Access to land (ATL), Access to technological resources

(ATR), and Communication skill (CS) were positive and significantly correlated with women business performance at 1% level of significance. But lack of training and tax amount were negatively correlated and at 1% significance level (as P<0.01 The result shows the acceptable reliability of the research variables in which, the correlation among predictors were not high and more than 0.80 indicates there are no multicollinearity problems among variables which is best for analysis of the data for this study.

4.3 The Regression Results (Inferential Statistics)

Table 4.10: Regression Results: Women Business Performance (WBP)

R = 0. 810[a], R^2 = 0.656, Adj. R^2= 0.648, Std. Error of the Estimate = .61745, Durbin-Watson (d) = 1.972, F-statistic = 87.040, P-value = 0.000										
Model		Unstandardized Coefficients		Standardized Coefficients	t-value	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	.421	.221		1.904	.058	-.014	.855		
	ATF	.325	.053	.357	6.122	.000**	.220	.429	.369	2.712
	ATL	.451	.054	.524	8.303	.000**	.344	.558	.315	3.171
	ATR	.301	.041	.373	7.287	.000**	.219	.382	.480	2.083
	CS	.177	.048	.169	3.683	.000**	.082	.272	.599	1.668
	LTR	-.364	.051	-.351	-7.174	.000**	-.464	-.264	.524	1.907
	ITA	-.115	.046	-.137	-2.518	.012*	-.205	-.025	.421	2.375

**P- value < 0.01, *p-value <0.05 level of Confidence, N = 281

Source: Survey data, 2019

Fitted model

WBP = 0.421 + 0.325ATF + .451**ATL+ 0.301**ATR + 0.177**CS - 0.364**LTR- 0.115*TA +err (4.1)**

The OLS result of was presented in table 4.10 above. R-squared/coefficient of determination was measured the goodness of f it of theexplanatory variables in explaining the variations in women business performance. As shown in the table above, R-squared and the Adjusted-R- squared statistics of the model were 65.6 percent and 64.8 percent respectively. The result indicates that 64.8 percent variation in the dependent variable was explained by the explanatory variables in the model. That means the explanatory variables (such as access to finance (ATF), access to land (ATL), access to technological reassures (ATR), Communication skill (CS) and Lack Training (LTR) are jointly explain about 64.8 percent of the variation in the women business performance of MSEs operating in Arba Minch town. The remaining 36.2 percent of the variation in the women business performance of the MSEs in Araba Mich (as measured by Likert scale) explained by other variables which are not included in the model, the so called exogenous variables to the mode contrary to the current model variables/endogenous variables. Besides, the, F- statistics (87.040) in model summary and ANOVA table below with (p-value of 0.000) which is used to test the overall significance of the model was presented and indicates the reliability and validity of the model at 1 percent level of significance. This tells us that the model as a whole is statistically significant.

Table 4.4: ANOVA Result

Model		Sum of Squares	Df
1	Regression	199.099	6
	Residual	104.460	274
	Total	303.559	280

The t-value of all variables is outside the lower and upper limit of confidence interval of coefficient which shows that all variables like access to finance, access to land , access to technological reassures, Communication skill and Lack Training that incorporated in the OLS model has statistically significant influence on dependent variable (women business performance).

The unstandardized coefficients of independent variables such as ATF 0.325, ATL 0.451, ATR 0.301 and CS 0.177 implies that one percent increase in variables such as ATF, ATL, ATR, and CS leads to increase in women business performance by 32.5%, 45.1%, 30.1%, and 17.7% respectively. Whereas, the unstandardized coefficient of the two explanatory variables such as LTR - 0.364, and ITA - 0 .115 shows that one unit changes in lack of training and increase in tax amount lead to a negative direction changes on dependent variable (WBP) MSEs operating in Arba Minch town.

5 Conclusion

The conclusion that can be drawn from the findings in the first hypothesis up to fourth hypothesis (H1, H2, H3, and H4), stated as “access to finance, access to land, access to technological resources, and communication skill

has positive and significant effect on business performance, were accepted. This means an increase in one unit/value of access to finance, access to land, access to technological resources, and communication skill were leads to an increase in business performance of women MSEs measured by five point Likert scale. Finally, conclusion that can be drawn from the findings of two remaining hypothesis, under the summary of the findings was, hypothesis H5 and H6 stated as "lack of training and increase in tax amount has negative and significant effect on business performance of women were accepted.; which shows that an increase on the value of this variable leads to decrease in business performance of women operating in Arba Minch, SNNPRS, Ethiopia.

6 Limitation & future research direction.

No study is free of limitation; accordingly there are limitations in the current study. Basically it was focused on determinants of women entrepreneurs' business performance in Arbaminch town and it is difficult to generalize to all women's at regional and country level.

- Hence, the study can be enhanced if it is done at regional and country level and also it is possible if it is done on women entrepreneurs' counterpart, the men entrepreneurs by using different methodology and sampling technique.
- Additionally it is possible to undertake the comparative study on the same topic and case area between women entrepreneurs and their counterparts, the men entrepreneurs.
- Further research can also incorporate additional variable other than the current variables of the study as determinant of women entrepreneurs' business performance that was not incorporated in the current study on the same area or at the regional and country level since the current study tests only six factors.

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