Factors Determining Self-Employment of University Graduates: A Case of North Wollo Zone-Ethiopia

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ABSTRACT- Entrepreneurship or Self employment is considered as parallel terms. It is recognized as an important source of economic development. In this study,measurement of or factors influencing on self employment and personality traits of university graduates in selected districtsof North Wollo zone of Ethiopia is evaluated in the year 2021. The logistic regression model results revealed that sex, number of family, age, field of study, need for achievement, risk taking propensity, self confidence, parent currently own business, social environment, perception of society on graduates to be self-employed, availability of capital, skill and knowledge, extent of graduates personal traits, significance of entrepreneurship education are affecting self employment of graduates significantly at different probability level.

Keywords: Entrepreneurship, Self Employment, North Wollo

INTRODUCTION

The global financial crisis has caused a lot of setback due the economic downturn among nations. Many organizations are cutting their work force size, and at the same time were very reluctant to create jobs and employ other unemployed individuals (Fritsch and Wyrwich, 2017). Self-employment has been considered as a central issue concerning labor market choices. It is t is not only an interesting solution for individuals who have few opportunities in the wage sector or earn less than others with similar observable characteristics but also an opportunity for dynamic individuals who seek a different career path. (Simoes*et al,* 2016).

1.1. Self-employment is the top most priority in Ethiopia. Labour market is the main source of an employed individual's income and employment opportunities.Social welfare is affected by both income and quality of the job. Employment and economic development are concomitant. Among the various employments, self-employment has a big deal of attention presently. Regarding the role of policy, strong negative relationship between unemployment and self-employment. Policy makers and planners, especially in developing countries are mainly focusing on promoting self- employment and small business(Ayele, 2014). The study also found that the propensity to be self-employed depends positively on whether the individual in question has ever received an inheritance or gift (Blanch flower, 2000).

The Ethiopian economy is mainly agriculture economy.80% of population derive their livelihood from agriculture and that contributes 52% of GDP. Remaining 12% population are in urban areas and they rely on Govt services,industry and construction. (Getinet, 2005, 2008). A number of studies that have focused on different aspects of the urban labor market in Ethiopia (Bizuneh*et al*., 2001; Getinet, 2003; Krishnan, 2001; Serneels, 2001) have emphasizedtheunprecedented level of unemployment in the urban centers of the country, particularly among the youth. Several factors are to blame for this sad state of affairs.

Higher education institutions (HEI) are one of the main suppliers of skilled youth labor force in the country. In Ethiopia different HEI producing increasing number of educated young from time to time, while the number of graduates is increasing from time to time, so doing the graduate unemployment rate (Fisseha, 2011).These graduates represent Majority of young workforce, and their contribution to the labour market is the prime concerns of governments, policy makers and higher education institutes (Getnet, 2008).

1.2. Statement of the Problem

In Ethiopia, like other developing countries, the number of graduate unemployment (GU) is increasing from time to time and posing great challenges on the graduates and also other stakeholders. The maximum affected are the youth, after graduating from TVT and other educational institutions, find themselves unable to secure formal employment opportunities, failing to contribute to the economic development of their personal life and also the country's despite their enthusiasm. (Eden, 2012).

When we come to north Wollo zone Administration the problem of unemployed university graduates is a real challenge in the area in which the data is obtained from Woldia, Gubalaftoand Habru districtMicro and Small Enterprise Development Officereport of 2019/2020shows that currently around 334 (193, 44 and 97 respectively)graduates are running their own business whilst 352 graduates of university(230,102 and 20 respectively) remain unemployed.Therefore, the aim of this study is to identify the main determinants of self-employment in university graduates in order to identify factors that influence graduates to start their own business.

1.3. Objective of the Study

1.   To examine the relationship between personal characteristics andtraits with self-employment in university graduate on north Wollo zone administration.

2.   To assess the relationship between socioeconomic and self-employment in university graduate on north Wollo zone administration.

3.   To analyse the relationship between human capital issues and self-employment in university graduate on north Wollo zone administration

1.4. Research Questions

In light of the above mentioned statement of problem, the following basic research questions will be addressed:

1.   To examine the relationship between personal characteristics and self-employment among the university graduates in north Wollo zone administration.

2.   To examine the relationship between the socioeconomic and self-employment among university graduates in north Wollo zone administration

3.   To what extentthe relationship between human capital issues and self-employment influence graduates to start own business in the study area?

1.5. Significance of the Study

This study will show the determinants of self-employment in the selected district of north Wollo zone administration. It also helps the government such that north Wollo micro and small enterprise development office to focus on self- employment by providing necessary support i.e. providing on-job-training needs big attention as well. The study will also use as a source of reference material for future research.

REVIEW OF RELATED LITERATURE

2.1. Concept of Self-Employment

Self -employed persons are the individuals who own sole or joint businesses of the unincorporated enterprises. It includes the unpaid family workers, outworkers and workers engaged in production for their own final consumption or own capital formation, either individually or collectively according to The European System of Accounts (ESA). The Organization for Economic Co-Operation and Development (OECD) that self –employed are the ones who own account worker or a person in production of goods/services and household consumption. Parker (2004) describes the self-employed individuals as those who earn no wage or salary but derive their income by completing their profession on their own account and at risk. Amaral and Batista (2006)

2.2. Unemployment

The high rate of university graduates unemployment significantly disturbs the economic development concern of the country. Despite the accelerating GDP growth rates the labor market has not sufficiently absorbed new job-market entrants. As the graduates unemployment rate increasing a distressing trend is emerging among many of higher institution graduates recently (Pauw*et al.,* 2014). Although, young Ethiopians have become better educated over the last decade, today many of these young labor market entrants are making great effort to find employment. Unemployment among educated youth is both damaging the economy leading to frustation and erosion of confidence and morale of young people.(Govender, 2011).

2.3. Empirical literature review

2.3.1 Factors Influencing Self-Employment

2.3.1.1 Personal characteristics and Personality traits

In Ethiopia, Hirut (2010) used a discrete choice model approach o study the socio-economic determinants of self-employment choice. The findings of this study show the probability for individual's decision on self-employment decreases as the individual's education increases indicating that, educated individuals to work for wage not self-employment. Beside this, age is reported to have a positive relationship with the probability of being self-employed. The average age of the self-employed individuals is found to be 31 showing that ,those who are self-employed individuals decide to engage in self-employment activities may be due to they were working for wage during their young age and decide to work by themselves.

2.3.1.2. Risk attitude

Kihlstrom and Laffont (1979) argued that self-employment is compressing the level of risk attitude. Finland, Ekelund et al. (2005) confirmed that risk aversion has a indirect and negative effect on the choice to become self-employed. Ahn (2010) concludes that risk tolerance has an contributes the platform to handle self-employment. Summating the case studies , self-employment is directly contributing to risk-attitude, Cramer et al. (2002) or, more recently, Colombier et al. (2008), Macko and Tyszka (2009), Wang et al. (2010), Brown et al. (2011b), and Fritsch and Sorgner (2013).

Ali Nurye (2017) in his study the result of the analysis indicated that willingness to take risk, positive attitudes towards self employment, need for achievement, need for independence, access to government policy and support, availability of starting capital and lack of formal employment option were found to be influential factors for graduates self employment.

2.4. Socio- economic factors

2.4.1. Social Values

Social backgrounds influence an individuals' approachto life, they similarly influence entrepreneurial activity and enterprise culture (Shoof, 2012). It has been identified that different cultures have varying values and believes. This indicates that some culture promotes self employment whereas others depress, some promotes achievement whereas others give low value to self employment (Fisseha, 2011).

Study conducted by Yordanos (2006) reveals that the attitude of the society (the culture) is not encouraging towards the development of youth self employment in Ethiopia. This indicates that the socio culture of Ethiopia doesn't encourage the youth to develop self employment behavior (Yordanos, 2006).

2.4.2. Family background

Family function and background directly contributes to self-employment. (Hout and Rosen, 2000; Chlosta*et al.,* 2012). The various factors are parents, their education level, freedom to act and the spouse adjustment and risk attitude level contributes to self-employment.

Dohmen et al. (2011) also argued family support has a decisive role to participate in self employment. An individual that have got financial, idea, motivational support from his or her family more motivated and participate in self employment than that do not get this kind of support. The levels of parent or spouse that give support in a process of transmission to self employment are positively correlated.

Dunn and Holtz-Eakin (2000) commented that the positive influence of family background is related to the availability of family financial capital and relevant human capital. As they stated in their study, each parent contributes towards their children's decision whether to be self-employed or employed.

2.4.3. Availability of starting capital

Availability of starting capital is other influencing factor for individual engagement in his/her own business. According to the finding of this study the availability of seed capital is the influencing factor which persuaded graduates to start/not to start their own business. As per the finding of this study majority of self employed graduates started their business by having available starting capital. They obtained this starting capital from sources like personal saving, family, private lender, and financial institutions. On the other hand, unemployed graduates failed to start their own business due to lack of available starting capital. This indicates that lack of available starting capital is the prime reason which limits them from starting their own business (Ali Nurye, 2011).

2.5. Human capital

2.5.1. EntrepreneurshipAwareness

Higher the entrepreneurship awareness and education significantly contributes to self -employment (Van der Sluis*et al.,* 2008; Brown *et al.,* 2011a); (Lucas, 1978; Calvo and Wellisz, 1980).

In a study by Franke and Luthje (2004), the authors concluded that lack of entrepreneurial education leads to low level of entrepreneurial intentions among students. This implies that the nature of programmers and the content of school curriculum to a large extent determine the entrepreneurial trait of students.
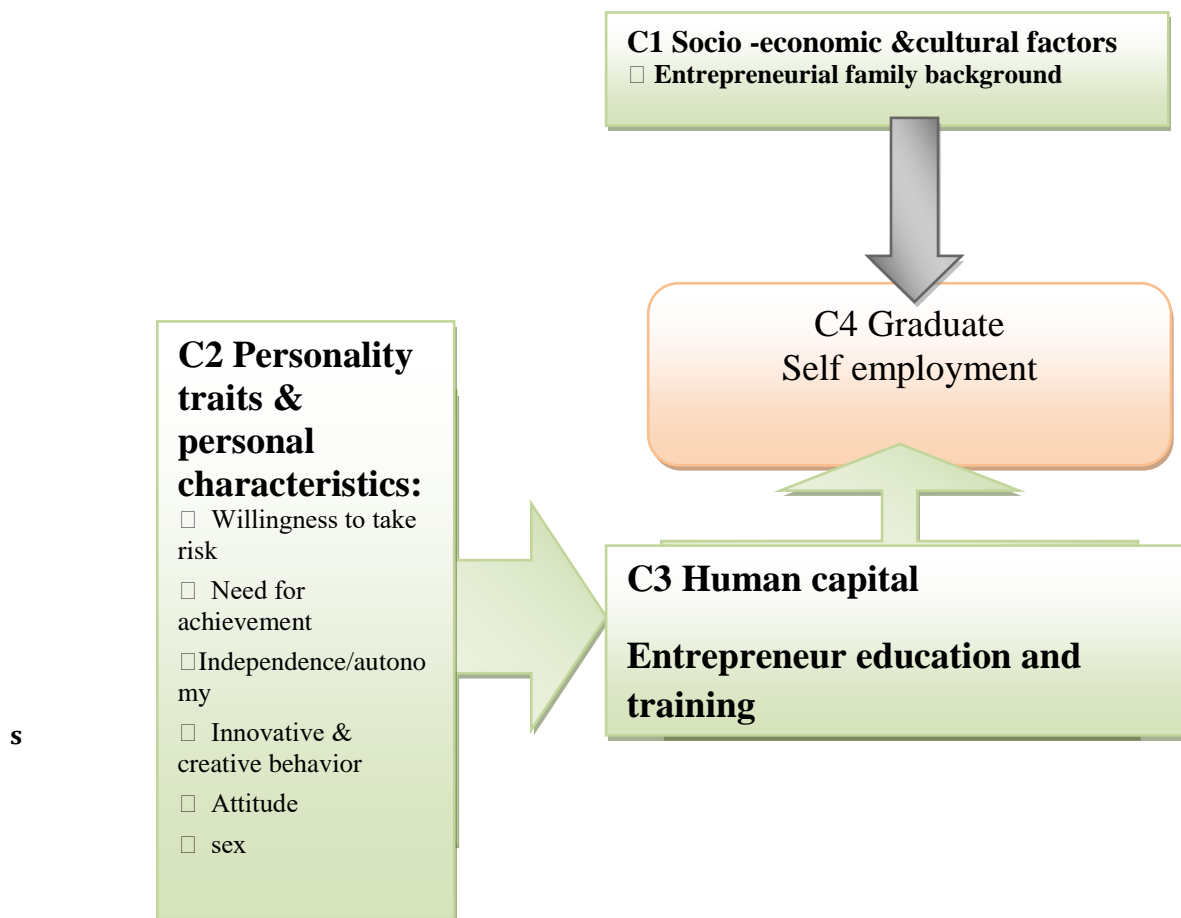
2.6.Conceptual Framework

Figure 1: conceptual framework of self-employment decision

In this component the availability of business related trainings and education which equip graduates with business knowledge and self employment behavior are examined.Finally at C4 the researcher takes a looks at the influence of the components from C1 to C3 on graduates self employment.

RESEARCH METHODOLOGY

3.1. Type of Data andSource
3.1.1 Primary data

In order to collect primary data semi - structured questionnaire will developed and distributed tounemployed and self employeduniversity graduatesin North Wollo zone administration in the three districts namely, Gubalafto, Woldia and Habruto meet the objectives of the study.

3.1.2 Secondary data

Secondary datawerecollected from journal articles, internet, published document,unpublished documents and micro and small enterprise development office reports

3.2.Method of Data Collection and instruments

Quantitative data wereused for the study. The quantitative data were collected using semi structured questionnaire from university graduates that are self-employed and unemployed.

3.3. Sampling Techniques
The study was followedtwo-stage sampling technique, where a combination of simple random sampling techniques was used to select the district and sample university graduates. In the first stage, Out of the 15 districts in North Wollo Zone, Habru, Woldia and Gubalafto districts were purposively selected due to high unemployment rate as compared with other districts. This information is obtained from North Wollo Zone Office. In the second stage,104sample graduated students wereselected using simple random sampling technique from each selected districts based on probability proportion to size sampling technique.

3.4 Target population and Sample Size
The target populations of this study was university graduates of those who are unemployed for half a year and above and self employedin north Wollo zone administration of the three districts such as Woldia, Gubalafto and Habru. The target population of this study is 644 (312 self employed graduates and 332 unemployed graduates).The sample size for the study was determined based on Yamane (1967) since the population is homogenous. The simplified formula provided by Yamane was used to determine the required sample size at 91% confidence level and 9% level of precision. The simplified formula used to determine the sample size of the study was specified as follows.

Table1Sample Distribution in district and total sample size

sample district	Total number of Target population		Sample size	
			Number	Proportion
Woldia	SE	171	28	26.92%
	UNE	252	41	39.42%
Habru	SE	70	11	10.57%
	UNE	46	7	6.73%
Gubalafto	SE	71	11	10.57%
	UNE	34	6	5.76%

		644	104	100%
Total				

Source: North wollo zone micro and small enterprise development office, 2021 n = <u>644</u>

RESULT AND DISCUSSION

Table2: Distribution of employed and self-employed respondents in the study area

		N	Percent	Cumulative Percent
Valid	Unemployed	58	55.8	55.8
	Self employed	46	44.2	100.0
	Total	104	100.0	

Source: Own survey, 2021

4.1. Analysis of Determinants of self-employment

A binary logistic model was selected to identify the determinants of self-employment among graduate students in the study area. The variables included in the model were tested for the existence of multicollinearity, if any. That is, prior to the estimation of the logistic regression model, the explanatory variables were checked for the existence of multicollinearity. In this study, contingency coefficient and variance inflation factor were used for multicollinearity test of dummy and continuous variables, respectively.

4.1.1. Co linearity Diagnostics

It is essential to test for co linearity problem before the logistic regression analysis is conducted. Because it very important to see if any strong relationship is there among the predictor variables which may affect the results of the study. Unfortunately, SPSS does not have an option for producing co linearity diagnostics in logistic regression. However, it is possible to obtain statistics such as tolerance and VIF (Variance of Inflation Factor) by simply running a linear regression analysis using the same outcome and predictor variables (Andy, 2005).

4.1.2. Logistic Regression Results

Logistic regression is helpful to predict a categorical variable from a set of predictor variables. Therefore, this analysis was conducted to assess whether the predictor variables significantly predict whether or not an individual is unemployed or self-employed.Fourteen independent variables relating to demographic, background, personality trait, and social and economic issues were regressed on the dichotomous dependent variable. Different tests of the fitness of the model and the regression results are presented in the proceeding sections in tables.

Table 3: Test of the overall significance of the Logistic Regression Model

Omnibus Tests of Model Coefficients

		Chi-square	Df	Sig.
Step 1	Step	88.539	24	.000
	Block	88.539	24	.000
	Model	88.539	24	.000

Table 4: R square test

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square

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1	54.247	.573	.767

The Nagelkerke R2 value of the model which is equivalent with R2 in linear regression model was 76%, which was comparatively higher than the benchmark value of 60%, indicating that the independent predictor variables explains 76% of whether or not an individual was unemployed or self-employed.

Table5: Classification Table

			Predicted		Percentage
			Employment type		
	Observed		Unemployed	Self employed	Correct
Step 1	Employment type	Unemployed	51	7	87.9
		Self employed	7	39	84.8
	Overall Percentage				86.5

The classification on table5 shows that how well the model predicts group membership. Seeing how well the model classified the cases is another way of determining how well a logistic model performs. The current model correctly classified 51 individuals who were unemployed but misclassified 7 others (it correctly classified 87.9% of cases). The model also correctly classified 39 individuals who were self-employed but misclassified 7 others (it correctly classified 84.8% of cases). Hence, the overall accuracy of classification is therefore, the weighted average of these two values (86.5%) of the cases; this may be seen as goodness of fit of the model.

Table6: Logistic Regression Results of Self-Employment decision

Predictors	B	S.E.	Wald	P-Value	OR
Sex male(ref) female					
	-2.233	1.056	4.473	.034*	.107
Number of family	-.146	.255	.328	.567	.864
Age	1.563	.972	.544	.108	4.774
Field of study business background (ref) Non-business background					
	-1.508	.972	2.406	.121	.221
Need for achievement High (ref) Low					
	-1.351	.641	4.445	.035*	.259

** *Significant at 1% level of Significance; * Significant at 5% level of Significance. OR = Odds Ratio, Ref. = Reference category. The first category is taken as reference category.*

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

This survey study has examined the effects of various personal and environmental factors that determine university graduates become self-employed. As the findings have evidenced that sex, need for achievement, family background, parent current own business, perception of social on graduate to be self employment, Entrepreneurship skill and knowledge, extent graduate /personal traits/ were found to influence the self-employed. Therefore, based on the findings of the present study, the following conclusions are drawn.

❖　Sex difference affects university graduates to become self-employed or unemployed. The survey result revealed that there exists a significant difference between being male and female in making self-employment decision. That is being male improves the probability of making self-employment decision.

❖　Family business background determines universitygraduates choice to engage in to self-employment unemployment.

❖　The result of the study indicates that there is a positive association between being from self-employed family and self-employed. This association might be emerged from the vital contribution of family business background to self-employment decision in terms of knowledge and experience sharing about starting and managing businesses, availability of financial capital and relevant human capital necessary to start a business.

❖　Auniversity graduates need for achievement gripping ability can influence his/her decision to become self-employed. The result of the study proves that need for achievement holding ability of a person has statistically significant association with self-employment. This indicates that self-employment usually requires a lot of energy, drive and long time involvement for its successful operations. Therefore, need for achievement determines university graduates to be unemployed or self-employed.

5.2. Recommendations

In light of the above findings and discussion of the study, the researcher found it important to propose the following recommendations to public policy-makers, academics, credit and saving institutions, for individuals who want to be an entrepreneur, entrepreneurship training service providers and others.

✤　The survey result revealed that the participation of women is low compared to males. So that policy measures need to be taken in order to encourage females' participation in self-employment and be an active contributor of the economy. Like males, females are innovative entrepreneurs that increase the pace of economic development and creators of jobs for others.

✤　Thus, policy makers, NGOs and other organizations working on women affairs need to work together towards improving women's participation of self-employment through different ways.

✤　A lot has to be done with respect to empowering women in different dimensions. There are few things being done in relation to women's empowerment but still yet not satisfactory. Preparing an entrepreneurship training programs that can sharpen women's entrepreneurial skills and business knowledge is an important measure. In addition to this, it would be lovely to promote the success of role model women entrepreneurs to others using different Medias and public conferences to increase women's self-employment participation.

✤　Unlike university graduates, the less qualified individuals are dominating the self-employment participation of the North Wollo zone. This situation might be problematic to the practice of a business, because withoutentrepreneurship education one cannot understand the outside world and equips him/her with the basic knowledge and skills to deal with the day-to-day problems. Hence, fostering self-employment among the university graduates would bring competition, product and service quality, growth, creativity, and solution to various types of problems in business. Government should support the newly emerging businesses by giving trainings and marketing assistance such as promotion of firms" products through exhibitions, directly market the product in to the domestic and overseas markets.

✤　Lastly, policy makers may offer financial incentives for the creation of business, make information available and enhance the status of entrepreneurs and businessmen in the society in that they can encourage self-employment.

5.3 Further Research Directions

Future research should examine the determinants of self-employment of university graduates including all other variables and covering the entire part of the country.

Future researchers can also expand this work by including all other districts with reasonably large sample size.

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