



***WOLKITE UNIVERSITY***

***COLLEGE OF BUSINESS AND ECONOMICS***

***DEPARTMENT OF ECONOMICS***

**DETERMINANTS OF GRADUATE STUDENT WILLINGNESS TO PARTICIPATE IN  
THEIR OWN BUSINESS CASE OF WOLKITE UNIVERSITY**

**A SENIOR ESSAY SUBMITTED TO THE DEPARTMENT OF ECONOMICS,  
IN PARTIAL FULFILLMENT FOR THE REQUIREMENT OF ARTS (BA)  
DEGREE IN ECONOMICS**

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## **DECLARATION**

I, Alafi declare that this thesis entitled: “determinants of graduate student willingness to participate in their own business case of wolkite university” is outcome of my own effort and study and that all sources of materials used for the study have been appropriately acknowledged.

To the best of my knowledge, this study has not been submitted for any degree in this University or any other University. It is offered for the partial fulfillment of the Bachelor degree in economics.

By: Alafi Nibret

Signature-----

Date-----

## **ADVISORS’ APPROVAL SHEET**

This is to certify that the thesis entitled “determinants of graduate students willingness to participate in their own business.” submitted in partial fulfillment of the requirements for the Bachelor degree in Economics, of the Department of Economics, and has been carried out by Id. No 051/09 under my/our supervision. To the best of my knowledge, is an original work and not submitted earlier for any degree either at this University or any other University.

Therefore I recommend that the student has fulfilled the requirements and hence here by can submit the thesis to the department.

**Advisor:** Abiy

Signature: \_\_\_\_\_

Date; June 2019

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### ***Abstract***

*Entrepreneur has become an important thing to support the decreasing of unemployment. There are several factors, which determine the graduate student willingness to become an entrepreneur. The purpose of this paper was to find the determinants of graduate student willingness to participate in their own business and the possible policy implication of the findings. The study observed attitude, sex, risk behavior, family business background, entrepreneurship course, and expectation of future success, family income, and, which determines graduate student willingness to become an entrepreneur. The study used logistic regression method to analyze and interpret the model. The primary data for this study was gathered through structured questionnaires distributed to Wolkite university graduate students. Stratified random sampling method was employed to select the 140 respondents out of 2215 graduate students and it also selected the students from the departments in the university proportionally. After collection of the data, it was analyzed by descriptive statistics and descriptive analysis. The limitation and policy recommendations are also discussed in the paper.*

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## List of acronym

WKU..... Wolkite University

CGPA..... cumulative grade point average

TPB..... theory of planned behavior

SNNRS..... southern nations nationalities regional state

LPM..... linear probability model

# CHAPTER ONE

## 1. Introduction

### 1.1 Background of the study

Entrepreneurship has increasingly evolved to such an extent of not only becoming a career but also a desirable employment option for most people these days. There are more small businesses being created. This has been evidenced by the growing number of people specializing in the conduct of small businesses. On the other hand professional or rather office jobs employment is no longer a fashion as people remains with less chances for getting salaried jobs. We have less prospects of being employed in established organizations. Probably this can be taken as a contributing factor that forces many people to seek opportunities for self-employment.

Today political and academic interest in support of entrepreneurship as a career choice is on the rise probably because of the link between new venture creation and the economic development. As a result, there is more small business being created. This has been evidenced by the growing number of people specializing in the conduct of small business. Teixeira et al (2006) are quoted to show that the continued economic uncertainty, corporate, government downsizing, and declining number of corporate recruiters on the education system have been fostering the appeal of self-employment. But it is also being noted as common for tertiary education to prepare students not only as a job seeker but mostly as job creators by becoming self-employed (golden et al, 2008).

In this twenty first century organizations are putting immense emphasize on creativity and innovation in every sphere of operation (Delmar and Davidsson, 2000). This is due to the fact that-in this hyper competitive market only creative and differentiated ideas can ensure distinctive competencies for firms and thus can be resulted in long term sustainable success.

The entrepreneurship resource in Ethiopia is at low level. The backwardness of the country has a direct relationship with traditional practices of the agricultural economy. The practices are more traditional. The industry, commerce and service giving sectors are not well exploited.

Due to the discouraging effects that happen during government change in the 1960's and transfer of individual properties to public ownership in the 1960s beginning and end modern agriculture, hand manufacturing, the interest for work and creativity were affected. In the present system due to the lack of effort to strengthen and create fair competitive atmosphere, the private sector is not showing the expected level of development. The business sector that the government monopolized cannot create a fair competitive atmosphere for creativity (EEA, September 30, 2005).

According to the record of the mainstay of revenue of Ethiopia there are about 330, 000 registered business organizations in the country. The consortium for entrepreneurship education (2005) found the majority of new jobs in Ethiopia were created by small-scale businesses, which in turn started by entrepreneurially minded individuals. Entrepreneurship creates new jobs and it stimulates innovation in existing companies (haftendorn and salzano, 2003).

Entrepreneurs in Ethiopia in sectors of agriculture, industry, commerce and service giving sectors are quite few in number. The entrepreneurial development training that won priority in the world is not given attention in Ethiopia. Resources for entrepreneurial development training in the country were very limited. In the 1st entrepreneurial training at the Ethiopian Chamber of Commerce about 122 people took part in the training. After its discontinuity for some years the training has been restarted by Enterprise Ethiopia. However, it was not reaching the far corners of the country. Although few of the trainees of the Ethiopian Chamber of Commerce and Enterprise Ethiopia are in the business of giving the training, it is hardly to say that it has been started. Empertec Ethiopia, the Association of Ethiopian Entrepreneurs, beyond creating awareness among the society couldn't perform productive activities. The association is organized to be a center for training, consultancy and credit for entrepreneurs. But, it couldn't achieve as much as it has expected so far.

With this in mind, the following study investigates the entrepreneurial intentions of graduating students including their determinants and challenges, as well as policy implications. The primary focus of this paper is entrepreneurial education for graduating students. This study stresses the importance of public and government policies that create an encouraging and enabling environment for startup business initiatives and risk taking

## **1.2. Statement of the problem**

According to Rasli, Rehman, Male Kifar, and Jabeen (2013), entrepreneurial activity promotes economic development throughout the world. So we have to identify what factors determine entrepreneurial willingness. According to this paper the entrepreneurial willingness of graduates is determined by attitude of graduates, family income, and sex, risk taking behavior of graduates, family background, entrepreneurial education, entrepreneurial training, and expectation of government support, social norms, and environment for starting business.

Since Osterbeek, et al (2010) in their journal titled “the impact of entrepreneurship education on entrepreneurship skill and motivation” proved that the entrepreneurship education, which is given by the education institution, does not have impact to student’s skill, motivation and intention to become an entrepreneur. Whereas Kumar, et al (2013) in his paper titled “students willingness to become an entrepreneurial” shows that entrepreneurship education influences the willingness of non-business student to become an entrepreneur. So the study, was, interested to have a compromising idea with regard to entrepreneurship education.

Moreover, Kumar, Agota and Valerie (2013) show that students individual desire, education and family background influences student’s willingness to become an entrepreneur. So the study was interested in analyzing the role of entrepreneurship education and family background on entrepreneurship willingness of graduate students.

Again Simone (2012) shows that men show greater interest in having own business than women, but Marvin and Flora (2014) said that gender and family background have no influence on student’s attitude towards entrepreneurship. So the study wanted to analyze the impacts of gender (now sex) on entrepreneurship willingness of graduate students. Marvin and Flora also say (2014) training on entrepreneurship has influenced their perception towards entrepreneurship. The student’s attitude is an important element in determining entrepreneurial intentions. So the study wanted to study entrepreneurship training and attitudes as a main determinant of entrepreneur willingness of graduate students.

Yustkoru, Acar and Tera in their paper titled as “willingness to take risk and entrepreneurial intention of university students: (2014) showed that being a risk lover has positive, moderate effect on entrepreneurial intentions. Therefore, the study took risk as a determinant of entrepreneurial willingness of graduate student.

Olufunso (2010) says that the obstacle to graduate entrepreneurial intention includes lack of access to capital, lack of competency, government support, risk and the macro-economy. The study wanted to intention of the students by asking about the above factors.

This study will examine the entrepreneurial intentions of graduating students at, Wolkite University. By examining the entrepreneurial intent of Ethiopia’s educated young people, the study can give recommendations for policies that may increase entrepreneurial activity, and therefore strengthen the Ethiopian economy.

Prior to this research paper, three other studies had been conducted on the entrepreneurial willingness of graduating students. Negsh and Amentie (2003) conducted the study at Jimma University in (2013), Alkadhem Zerihun at Addis Ababa University in 2014, and a group of researchers at Bahirdar University. While Negash and Amentie mentioned perceived self-efficiency, university environment, perceived educational support, and students attitude as a significant determinant for entrepreneurial intention of graduates. Zerihun also mentioned internal factors (gender, level education, family, family background and attitude) and external factors (pressure from family, friends, and role models). In addition to the above mentioned factors, the researchers from Bahirdar also added entrepreneurial training, family income, as significant factors, which affect the entrepreneurial intention of graduates. In addition to these factors mentioned above, monthly allowance/ remittance, success, CGPA, intention, and distance from major cities were incorporated in this paper as significant factors, which affect the entrepreneurial intention of graduates.

Moreover, they used descriptive method of analyzing variables but the study examined the effect of these variables on graduate willingness towards entrepreneurship by employing econometric model of analysis. Because it is uses to quantify to what extent the problem aggravated to what

extent each variables are important. The gap is all thus studies are too poor for addressing the issue of graduating students in all parts of the country. Then the main issue of thus study is to adress the main factors of graduating student willingness to participate in their own business due to omitting unnecessary variables like entrepreneurship course and intention in order to meet the objective.

### **1.3. Objectives of the study**

#### **1.3.1. General objective of the study**

The general objective of the study was to analyze determinants of graduate student's willingness to participate in their own business in case of Wolkite University.

#### 1.3.2. Specific objectives of the study

##### **Specific objectives of the study were:**

- To examine the effect of demographic characteristic such as sex, family background, family income on graduate's intention to be an entrepreneur.
- To analyze the students future intention for entrepreneurship
- To assess whether expectation of success by being self-employed is motive or not for self-employment

### **1.4. Research question**

1. What are the expectation of success by being self-employed is motive or not for self-employment?
2. What is the effect of demographic characteristic such as sex, family background, and family income on graduate's intention to be an entrepreneur?
3. What are the student's future intentions for entrepreneurship?

### **1.5. Significance of the study**

- The findings of this study was to use a building stone for other relative researches by providing sufficient information about higher institution graduate student's willingness to participate in their own business. It enabled Ethiopian authorities to have a better understanding about what motivates young people on entrepreneurial activities. Those authorities can hopefully implement educational and public policies that will enfranchise young entrepreneurs, and hence stimulate the Ethiopian economy. By having a good understanding of factors affecting entrepreneurial intention among students, the government and universities will be able to create and execute policies and curriculum based on motivating and hindering factors. Entrepreneurs do not only help themselves but also create opportunities for others.

### **1.6. Scope of the study**

This paper was limited both temporally and spatially to make more understandable and clear. The study was conducted in Wolkite University in 2018/2019. The study considered only this year regular graduating students. It excludes previous year graduated students. It also excluded summer, extension, distance and evening students because it is difficult to find them.

### **1.7. Limitation of the study**

Like other studies, this paper will have its own limitations. Some of the limitations are;

- Insufficient source of materials like related research paper
- Lack of internet access in the campus.
- The sample of the study will be selected from graduates of WKUS. This will limit to the generalizations of the findings of the study for all university students in Ethiopia.
- The study focuses on 9 variables .There might be other variables that can determine entrepreneurial intention of university graduates.

The study also encountered with a problem of finding the graduating students of gubire campus. We

could not find them because they went on trip for educational purpose. Thus, the study deducted the proportional sample covered by gubire campus using scientific formula called finite population correction for proportion.

Finally, as the study was cross sectional and only addressed the opinion of students before graduation, there could be changes in said opinions once the respondents actually leave school and enter the job market.

### **1.8. Organization of the study**

This paper was organized in to five chapters. The first chapter has the introduction part which contains the background of the study, statement of the problem, objectives of the study and limitation of the study. The second chapter was all about review of related literature which presents topics related to the study advanced by various writers. The third chapter was dealing with the methodology of the study including data collection method, sampling method, method of data analysis, hypothesis and model specification. The fourth chapter was dealing with the results and discussion based on descriptive and econometric analysis. The last chapter of the paper was the conclusion of the study and recommendation based on the findings of the study.

## CHAPTER TWO

### 2. Literature Review

#### 2.1. Theoretical literature

The word entrepreneurship originates from the French word “entrepreneur” meaning to begin, or undertake (Parker, 2009). Entrepreneurs are also known as self-employed people, which is the working definition of this paper. To this day, scholars have no consensus on the words exact definition. But the most generally acceptable definition of entrepreneurship, as defined by Hisrich and Peters (2002) ,is the process of creating something new with value by devoting the necessary time and effort assuming the accompanying finance, psychic and social risk and reserving the resulting rewards of monetary and personal satisfaction and independence.

Furthermore, Hisrich, Peters, Shepherd (2005) explain about entrepreneur as a person who takes risks and create innovation. In a similar way, entrepreneur as a person who continuously makes something new that identified the importance of observing opportunities (Thompson, 2004).In other way, Gurusamy (2009) also mentioned that entrepreneur as the one who create innovations in developed country. In underdeveloped country, copycat can be called as entrepreneur. He also stated that entrepreneur is someone that ignore the measurement and particular type, entrepreneur build their own production, system of the business, and business unit. The most important idea of entrepreneur is managing his or her own enterprise.

Casson (2003) mentioned that there are two approaches to explain entrepreneur; they are functional approach and indicative approach. Functional approach describe entrepreneur as someone who does entrepreneurial activity. It is someone who does the duty of an entrepreneur. While, functional approach describe entrepreneur in a more general way, indicative approach define entrepreneur in a more practical and sensible way. Indicative approach describe entrepreneur based on their rank in their society, legal rights, and bound in a relationship with any political groups.

## 2.2. Empirical literature

As the different researchers point it out, numerous motivational variables influence the objectives and intention of graduating students. Factors of special notes include risk-taking ability, tolerance for ambiguity, and locus of control (Quan, 2012). Various studies recognize the positive relationship between role models and entrepreneurship. Young individuals who are inspired by entrepreneurial role models develop greater entrepreneurial intentions (Deakins and Glancey, 2005; Van, Auken, Stephens, Fry and SILVA, 2006). Smith and Beasley (2011) also determined a list of factor that enables entrepreneurial intent, including financial gain, content of graduate study program, and presence of business partners, and comfort with risk taking and wealth of creative ideas.

Entrepreneurial intentions are often prejudiced because of three common variables (Krueger et al., 2000). First, entrepreneurial intention is activated by a person's attitude towards entrepreneurial setup. Holden Jameson and Walmsley (2007) stated that the attitude of related actor in groups (i.e. family, colleges, friends and customers) influence the entrepreneurial intentions of young graduate. Another factor is self-effectiveness, self-efficiency. Self-efficiency significantly affects entrepreneurial behavior and amplifies entrepreneurial intentions among young individuals (Matlay, 2005). Souitaris, Zerbinati and Al-laham (2007) conducted research on students who were enrolled entrepreneurial program, and found that numerous students experienced positive shifts in attitude towards entrepreneurial activity. Such movement revelations are referred to Bandura (1985) as self-efficiency. These revelations directly influenced students to think more favorable on entrepreneurship, and hence engage in entrepreneurial activity.

While education is an opportunity in itself, study programs must support graduating students. According to Krueger et al. (2000), independency is a strong motivational factor in the development of entrepreneurial intentions. Universities can instill independence in their students, and thus encourage entrepreneurial spirit.

Entrepreneurial increases the knowledge of the benefits of entrepreneurship and helps students understand how to implement entrepreneurial endeavors (Galloway and Brown, 2005). Overall, entrepreneurial intent increases in students who participate in such programs (Linen, 2004).

When examined through the lens of theory of planned behavior (TPB), entrepreneurial education performs as predictive factors for further entrepreneurial behavior. This is an example of how TPB's associates attitudes with behavior (Ajzen, 1991). When analyzed in the different cultural context, supportive university environments always influence the entrepreneurial self-insurance of graduating students (Auto et al. 1997).

### **2.3. Hindering factors**

According to a recent study by Smith and Beasley (2011), the entrepreneurial constraints faced by graduating students are both internal and external: poor advisory assistance from institutions, lack of familiar entrepreneurial experience, lack of finance, lack of field specific mentors, and slow growth of the economy. Rae and Weodier (2006) identified another series of internal and external limiting factors: lack of awareness, lack of confidence, limited understanding of business planning and setup, insufficient guidance about entrepreneurial careers, family discouragement and financial uncertainty. The following discussion will further analyze some of these constraining or hindering factors.

All researchers agree that the university plays an important role in initiating entrepreneurial spirit among students (Wang and Wong, 2004) universities that provide support for students to engage in entrepreneurial activities, and stress the value ideas in their programming, will

Turn out more entrepreneurial students. The educational support that universities provide via professional education is an important element of entrepreneurial assessment. To strengthen this argument, Wang and Wong (2004) found that ineffective or improper preparation at the university level significantly hinders the entrepreneurial intent of graduating students. In addition, Ahmad, Nawaz, Shaukat, Rehman, Usman and Ahmad (2010) also emphasized that educational system plays crucial role in shaping and identifying entrepreneurial intention in graduating students. Studies by Greene and Saridakies (2006) and Galloway and Brown (2002) found that entrepreneurial education is a vital for enhancing innovative skills in graduating students.

At the same time, the lack of education becomes a series hindrance. This confirms Wang and Wong's supposition: effective educational support and entrepreneurial education at the university

level are crucial to the development of higher-level entrepreneurial intent among graduating students.

According to Hunjra, Ahmad, Ur-Rehman and Safwan (2011) the lack of available formal sector financing is a significant limiting factor in the endeavor of young entrepreneurial, furthermore, Demircuc-Kunt, Beck, Makisimovic and Leaven (2006) state that use of supplier's credit and difficulty in accessing bank loans is ad motivating factor. In some countries, access to these resources is virtually none existent for young entrepreneurial.

## CHAPTER THREE

### 3. Methodology

#### 3.1. Back ground of the study area

Wolkite University (WKU) is one of the third generation higher institutions that have been founded in 2012(2004). it established for the purpose of providing and promoting higher education learning, research and outreach programs in the country to ensure the realization of the national vision of researching the level of middle income countries by 2020.the university located in the SNNRS, in Garage zone,158km, southwest of the capital city, Addis Ababa, on the way to Gemma. The first 543 students joined in the university in 2011/2012 academic year. The university contains six collages namely business and economics, agricultural collage, engineering, social science and humanity, medicine and health science, computation collage.

#### 3.2. Data type and source

For effective accomplishment of the study, the study used only primary data type which was collected through structured questionnaire. The questionnaire was designed in such a way it provides statistical information on students family occupation, entrepreneurial education and training, risk behavior that they will have, expectation of government support, and other important variables. For this, the unit of observation was the graduating students of WKU. The survey in this study was conducted from February 2018 from some sample students of Wolkite University.

#### 3.3 Sample size and sampling technique

The target population of the study was graduate students of WKU who are 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> year students in 2018/19 academic year.

Freshman and senior students were excluded from the survey because they are not at the time to think about what to do after graduation. In 2018/19 there are around 2215 graduating students registered in regular programs of all campuses in WKU (Wolkite University students enrolled in regular undergraduate degree programs 2018 (2011E.C). But, the study only took 1410

graduating students from the three colleges (namely, business and economics, health science and engineering colleges), and this mainly because of degree of representativeness, also money and time constraints that the study faced.

To determine the sample size of the survey we use the formula that suggested by Taro Yammen (1967). The formula is used to determine the size of the sample for a given amount of population. And sampling error (level of significance) is 8% .and sampling error (e) has been determined the formula as suggested by Yammen is used to determine the sample size of the survey considering the total number of the target population. To arrive at the sample size 8% level of significance and That will 8% risk of committing sampling error and plugging these values in to the above formula the adequate sample size of the survey is determined as follows.

Then, using Yammen formula and 1410 size of the population the exact sample size of the survey is determined as follow:

$$n = N/1+N (e)^2$$

Where: n – Is the sample size

N- Is the total population of the target group

e - Significance label of 8%

$$n = N/1+N (e)^2$$

$$= 1410/ 1+1410(0.08)^2$$

$$n = 140$$

After the total size of the sample has been determined the next task was to determine the total number of students from each department to be included in the sample. In this regard students from each department were include in the sample proportionately. This was to give equal chance of representation to all departments in the sample.

The total number of students from each department included in the sample was summarized below in the table:

**Table 3.1:** the total no of students from each department included in the sample

College	Department	No of students		Total no of students included in the sample		Total
		M	F	Male	Female	
Wolkite institute of technology	Hydraulic & water reserent	56	41	$(56/1410)*140=6$	$(41/1410)*140=4$	10
	Cottm Eng.	84	89	$(84/1410)*140=8$	$(89/1410)*140=9$	17
	Food Eng.	37	44	$(37/1410)*140=4$	$(44/1410)*140=4$	8
	Civil engineering	102	83	$(102/1410)*140=10$	$(83/1410)*140=8$	18
	Electrical engineering	89	47	$(89/1410)*140=9$	$(47/1410)*140=5$	13
	Mechanical engineering	68	16	$(68/1410)*140=7$	$(16/1410)*140=2$	8
	Architecture and urban planning	23	13	$(23/1410)*140=2$	$(13/1410)*140=2$	4
	Garment	19	25	$(19/1410)*140=3$	$(25/1410)*140=2$	5
	Chemical	63	40	$(63/1410)*140=6$	$(40/1410)*140=4$	10
	Sub- total	541	398	55	40	93
Health science college	Nursing	46	14	$(46/1410)*140=5$	$(14/1410)*140=1$	6
	Medical laboratory	22	13	$(22/1410)*140=2$	$(13/1410)*140=1$	3
	Health officer	30	26	$(30/1410)*140=2$	$(26/1410)*140=3$	6
	Mid wifery	32	17	$(32/1410)*140=3$	$(17/1410)*140=1$	5
		Sub- total	130	70	12	6
Business & economic college	Accounting & finance	-	-	-	-	-
	Economics	74	14	$(74/1410)*140=7$	$(14/1410)*140=2$	9
	Management	75	65	$(75/1410)*140=7$	$(65/1410)*140=6$	14
	Marketing management	28	15	$(28/1410)*140=3$	$(15/1410)*140=1$	4
		Sub – total	177	94	17	10
	Grand total	848	562	84	56	140

Source: own computation used data of Wolkite University registrar office (2018/19)

Finally simple random sampling was used to select students from each department to be included in the sample. This was for the reason that random sampling gives equal chance of being selected

to all students in a department. In effect it makes sample students in the survey more representative of the target population. Student's identification number was used as sample framework to select student be included in the sample from each department.

### **3.4 Method of data analysis**

Both descriptive and econometric method of analysis was employed to study the effect of different variables. By applying descriptive statistics such as tables, frequency and percentages the study was compared and contrasted different categories of sample units with respect to desired characteristics. Under econometric analysis since the study mainly deals with categorical variables, therefore the study used linear probability model (LPM), Probit (normit) or logit model to estimate these categorical variables. As linear probability model was plagued by different problems, probit and logit were preferred to be the best models of estimating categorical variables. Moreover, Logit and Probit models were essentially the same.

### **3.5 Model specification**

#### **3.5.1 Theoretical model**

##### **The Logit model**

Even though there were many binary regression models in econometrics, in which the dependent variable was categorical taking a 0 or 1 value, here logit model was more preferable than linear probability model (LPM) when the response takes one of any two possible values representing success and failure. This was because LPM was plagued with many problems. Such as:

Non-normality of the disturbances

Heteroscedastic variance of the disturbance term

Non-fulfillment of  $0 < E(y/x) < 1$  (possibility of laying out side 0-1 range)

Questionable value of  $R^2$  as a measure of goodness of fit. So LPM is not logically a very attractive model because it assumes that even if  $\pi_i = E(y=1/x)$  increases linearly with  $x$ , that is the marginal or incremental effect of  $x$  remain constant throughout. This seems sometimes very unrealistic. Therefore, there was a need of probability (logit) that has two features.

- As  $x$  increases  $\pi_i = E(y=1/x)$  increases but never steps outside the 0-1 interval

- The relationship between  $\pi_i$  and  $x_i$  is non-linear, that approaches one at slower and slower rates, as  $X$  gets very large. As a result, logit model was the appropriate one. To estimate the determinant of entrepreneurial intention of graduates the study used the logit model, because the dependent variable assumed only two values which showed the occurrence and non-occurrence of an event. In this setting, the dependent variable was dichotomous and assumes 1 if graduates are willing to participate in their own business and 0 if not. The binary choice model, which was used to determine the determinants of graduate's entrepreneurial intention, can be given as the following form.

$$Y^* = \beta X_i \dots \dots \dots 1$$

Where the response variable ( $Y^*$ ) is a vector of explanatory variable, was a vector of parameter to be estimated. 1 if graduates were willing of be an entrepreneur and 0 if not willing. Therefore, the probability that a graduate's willingness to be an entrepreneur was given by:

$$P(Y = 1/X) = P(Y^* > 0) = P(\beta X + E > 0) = F(\beta X_i) \dots \dots \dots 2$$

Where  $F(X_i)$  was the cumulative distribution function,

This was structural model for estimating the probability and it can be estimated either using the probit or logit model, depending on the assumption on distribution of the error term (Green, 2003). The model of this study used to identify factors that affect the probability of graduate's willingness to be an entrepreneur.

$$\pi_i = \frac{e^{Z_i}}{1 + e^{Z_i}}$$

Where  $Z$  was a linear function of  $n$ -explanatory variables( $x$ ) and can be stated as:

$$Z_i = \beta_0 + \beta_1 x_{1i} + \beta_2 x_{2i} + \beta_3 x_{3i} + \beta_4 x_{4i} + \dots \dots \dots + \beta_k x_{ni}$$

If  $\pi_i$  was the probability of graduate's willingness to be an entrepreneur, then the probability of not willing to be an entrepreneur was;

$$1-p_i = 1 / (1 + e^{z_i}) \dots\dots\dots (4)$$

So the expression  $P_i / (1 - P_i)$  was the odd ratio given as;

$$P_i / (1 - p_i) = 1 + e^{z_i} / 1 + e^{-z_i} = e^{z_i} \dots\dots\dots (5)$$

Where  $p_i / (1 - p_i)$  is the odd ratio or the ratio of the probability of that a graduates willing to be an entrepreneur to the probability of graduates not willing,

Taking the natural logarithm of the odds ratio, we got what was known as logit model.

$$L_i = \ln (p_i / (1 - p_i)) = Z_i = \beta_1 + \beta_2 X_i$$

Estimation technique of the model can be written follows

$$L_i = \ln (p_i / (1 - p_i)) = \beta_1 + \beta_2 X_i + u_i \dots\dots\dots (6)$$

### 3.5.2 EMPIRICAL MODEL

Suppose for example in the study the dependent variables (willingness of graduate's students towards job creation) many have two values or response. One for those graduates who are willing and zero for who are not.

In general the dependent variables (entrepreneurial willingness graduates) was the function of attitude of students towards private business, gender, risk, family business background, entrepreneurial training, family income and attitude, entrepreneurial education, expectation of government support, social norms, and environment for starting business.

Specification was done as follows:

Thus  $E_{wg} = F (At, S, R, Fb, Fi, Ee, Eg)$  Therefore,

$$E_{wg} = a + \beta_1 At + \beta_2 S + \beta_3 R + \beta_4 Fb + \beta_5 Fi + \beta_6 Ee + \beta_7 CGPA + \beta_8 Sc + \beta_9 Rmt + U_i$$

Where,

$E_{wg}$  – Entrepreneurial willingness of graduates

$At$  – attitude students towards private business

$Fb$  – family business background

S- Sex

R- Risk

Fi – Family income

Ec- Entrepreneurial course

CGPA-cumulative GPA of the students

Sc- success

Ds- Distance from major cities

Ui- disturbance term

$\beta_i$  represents coefficient of attitude, sex, risk, family business background, family income, entrepreneurship course, expectation of government support, social norms and the environment for starting business.

### **3.6 Definition of variables and Hypothesis**

Based on theoretical expositions and previous studies, the following explanatory variables were hypothesized to influence the willingness of graduate students as follows. Entrepreneurial willingness of graduates was the dependent variable.

**SEX:** Simone (2012) showed that men showed greater interest in having their own business than Women so in this paper male were expected to have strong motive to be entrepreneur than females.

**ATTITUDE:** Marvin and Flora (2014) said that student attitude was an important element in determining entrepreneurship intentions.

A positive mind set towards entrepreneurship favored new Venture while a negative attitude discouraged their intentions. So those students who have positive attitude toward self-employment were motivated to start their own business than these who have negative attitude.

**FAMILY BUSINESS BACKGROUND:** Krueger (1993) suggest that students with self-employed father's gain exposure to high knowledge of entrepreneurship from an early age. So those students who come from a family business background was expected to have better

initiation to be self-employed than government employed. This was because the business experience or entrepreneurial skills that have gained from their family enable to create for themselves.

**RISK:** yurtkoru, Acar and tera (2014) suggest that being a risk lover had positive, moderate effect on entrepreneurial intentions. So graduates who had risk taking behavior had more probability to start their-own business than those who have risk averse.

**ENTREPRENEURSHIP COURSE:** Amisa and Vasilika (2013), show that the entrepreneurial curriculum and content along with gender, working experience and mother’s occupation are statically significant. So those graduates who have taken entrepreneurial course will have more entrepreneurial intention than those who have not taken entrepreneurial course.

**FAMILY INCOME:** Those students whose families had higher monthly income were expected to encourage students to be an entrepreneur. Therefore, family income had positive contribution to entrepreneurship willingness of graduates.

**SUCCESS:** these students whose confidence was high by considering different factors to be successful if they start their own business, then they would be encouraged to become self-employed. Thus, success has positive impact on the willingness of the students.

**CGPA:** these students with a high CGPA after graduation would have been encouraged to be an entrepreneur in the future. Therefore, CGPA had a positive impact on the willingness of the graduate students.

**REMITTANCE:** these students who received a higher allowance from their parents were assumed to be discouraged to become self-employed. Therefore, remittance had a negative impact on the willingness of the students.

<b>Table 3.2 Summary of explanatory variables and their expected signs</b>			
Variables	Short form	Expected sign	Description
Entrepreneurial willingness of graduates	Ewg	Dependent	1=if a graduates are willing 0=if not
Family income	Fi	+	

Family business background	Fb	+	1= if one or both parents are self employed 0=if otherwise
Attitude	At	+	1=if a graduate has positive attitude 0=if a graduate has negative attitude
SEX	Sex	+	1=if a graduate is male 0=if a graduate is female
entrepreneurship course	Ec	+	1=if a graduate has positive EC 0=if a graduate has negative EC
Risk	R	+	
CGPA	CGPA	-	
Remittance	RMT	+	
Success	SC	+	

## CHAPTER FOUR

### RESULT AND DISCUSSION

#### 4.1.Descriptive data analysis

In this chapter, the researcher tries to discuss the collected data and results using both descriptive and econometric method of data analysis. Under descriptive method of data analysis, the study used tables, frequency, percentages.

About 30% (77) of the sample students are female headed while 71% (188) are male headed students. From the total respondents 21% (56) are graduating students willing to be an entrepreneur while 79% (209) are not willing to become self-employed.

Result on family job background indicates that 31% (82) of the graduating students have self-employed fathers while the remaining 69% (183) of the students have government or non-government employed fathers. It also indicates that 32% (86) of the total graduating students have self-employed mothers and 68% (179) students have government or non-government employed mothers.

According to the survey 63% (219) heads of the graduating students have a positive attitude towards self-employment while the remaining 17% (46) of the heads have a negative attitude toward being an entrepreneur. The study also found that 49% (131) of the total graduating students took entrepreneurial training and the remaining 51% (134) of the students did not take the entrepreneurial training.

#### 4.1.1. Sex structure of respondents

Table 4.1 sex structure of respondents

Variable	Non willing		Willing	
	Frequency	Percentage	Frequency	Percentage

Sex	Male	34	60.71	154	73.68
	Female	22	39.29	55	26.32
Total		56	100%	209	100%

Source: own survey, 2019

As we observe from the data above, male students who are willing to become an entrepreneur have the highest percentage than the female counter part with 73.09%, and female have the rest 26.91%. Also Male students who are not willing to be an entrepreneur have the highest percentage which is 58.62, and the female counterparts have 41.37 percent.

#### 4.1.2. Occupational background graduate's family

Entrepreneurship decomposition using family job background enables to answer the question “how many of the students are influenced by their family’s job?” in the study area. Accordingly an effort has been made to decompose willingness to entrepreneurship using the graduate student’s family job background. The result of the survey shows that, among the total willing students 68.42% of them have a self-employed father, and only 31.58% of them have a government or non-government employed fathers. And from the total willing students 66.99% of them have self-employed mothers, while 33.01% are with government or non-government employed mothers (table 4.2).

Table 4.2 occupational background of graduate's family

Parents occupation	Non willing		Willing		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	%
Father: self-employed	40	15.09	143	53.96	183	69.06
Employee	16	6.04	66	24.91	82	30.94
Total	56	21.13	209	78.87	265	100
Mother: self-employed	39	14.72	140	52.83	179	67.55
Employee	17	6.42	69	26.04	86	32.45

Total	56	21.14	209	78.87	265	100
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Source: own survey, 2019

#### 4.1.3. Distributions of total respondents by their risk taking behavior towards self-employment

Table 4.3 distribution of total respondents by their risk taking behavior towards self-employment

Risk taking	Non willing		Willing		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Risk lovers	9	3.40	129	47.92	136	51.32
Neutral	13	4.91	73	27.54	86	32.45
Risk averse	34	12.83	9	3.40	43	16.23
Total	56	21.14	209	78.86	265	100%

Source: own survey, 2019

Decomposition of entrepreneurial willingness by risk taking shows that with higher risk taking, there are high numbers of graduating students who are willing to be an entrepreneur. Relatively, graduating students willing to an entrepreneur with a lower risk taking lever are very small in number (table 4.3).

#### 4.1.4. Distributions of total respondents with entrepreneurship course

Table 4.4 distribution of total respondents with entrepreneurship course

Training	Non willing		Willing		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Taken	8	3.02	123	46.42	131	49.43
Not taken	48	18.11	86	32.45	134	50.57
Total	56	21.13	209	78.87	265	100%

Source: own survey, 2019

The study took the assumption that when the number of graduate students who took entrepreneurial training increases, the number of students willing to become an entrepreneur will also increase. Accordingly, the result shows that, from the total students willing to be an entrepreneur 58.85% took the entrepreneurial training. And from the total non-willing students only 3.83% of the students took the training (table 4.4).

#### 4.1.5. Distribution of total respondents by their attitude towards self-employment

Table 4.5 Distribution of total respondents by their attitude towards self-employment

Attitude	Non willing		Willing		Total	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Positive	12	4.53	207	78.11	219	82.64
Negative	44	16.62	2	0.75	46	17.36
Total	56	21.14	209	78.86	265	100

Source: own survey, 2019

Attitude of graduate students positively affect graduate students willingness to participate in their own business. Those graduates who have attitude towards entrepreneurship are more willing to participate in their own business (KibretuTiftu, 2008). The result from the survey shows that, from the total willing graduating students 99.04% have a positive attitude towards self-employment. And from the total non-willing graduating students only 21.43% have a positive attitude towards self-employment (table 4.5).

#### 4.2. Continuous variables relating to the willingness of the graduates

Table 4.2.1 the intention and expectation of success of the graduates

Variable	Non-willing	Willing	Ttest
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	Obs.	Mean	Std.de.	Obs.	Mean	Std.de.	t-ratio	Pr( T  > t )
Attitude	56	9.7	3.6	209	14.1	3.2	-9.0246*	0.0000
Success	56	9.23	3	209	13.3	3.2	-8.4521*	0.0000
CGPA	56	2.9	0.4	209	3	0.4	-1.6460	0.1010
Remittance	56	542	361.41	209	603.8	391.1	-1.0677	0.2866
Family income	56	11604	23679.53	209	7991.9	8400.2	1.8245	0.0692
Risk	56	37.7	88.6	209	45.2	109.7	-0.4719	0.6374
Entrepreneurial course	56	60.2	31.10	209	65.8	29.81	-1.2386	0.2166

Source: own survey, 2019

#### 4.2.1. Expected success of own business

Scholars discovered that some people become self-employed partly to get a higher income, in other words to be successful in the work they do. Successful entrepreneurs expand the size of the economic pie for everyone. (Russell S. Sobel, 2008). The study assumes that, the expectation of success of the students can be measured by their skills, access to finance, government support, and rules and regulations of the country. According to the above table, 56 students of the total respondents are not willing to be self-employed with an average of 9.23, and standard deviation of 3. On the other hand, the 209 students are willing to become self-employed with an average of 13.3, and standard deviation of 3.2. The t-test result shows that, expectation of success is statistically significant at 5% level of confidence.

According to the t-test, CGPA, Remittance, family income, Risk, and entrepreneurial course are statistically insignificant.

#### 4.2.2. Attitude of the graduates

The study assumed that attitude of the graduates could be affected by factors like parent influence, continuous government monthly salary, challenging job market, and being own boss. The t-test result shows attitude of the students is statistically significant at 5% signifying that the mean of willing students is greater than that of the non-willing students. According to the result, the overall mean of the willing graduates is 14, and 9.7 is the mean for the non-willing graduate

students.

The study tried to measure above two variables, expectation of success and attitude of the students by taking the method called Likert scale. Likert scale is a psychometric response scale primarily used in questionnaires to obtain participants preference or degree of agreement with a statement or set of statements. Likert scales are a non-comparative scaling technique and are unidimensional (only measure a single trait) in nature. Respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale (RensisLikert, 1932).

### **4.3. Econometric analysis**

#### **4.3.1. Diagnostic test**

Multicollinearity is an indication of a linear relationship between explanatory variable (Gujarati, 2004). Variance Inflating Factor (VIF) technique is employed to detect the existence or not existence of Multicollinearity problem. VIF is the measure of the reciprocal of the complement of the inter-correlation among the predictors. The decision rule for Multicollinearity test the model stated is a variable whose VIF are greater than 10 indicate existence of multicollinearity. The result shows that VIF 1.92 which is less than 10. This implies there is no multicollinearity problem in the model.

Ovtest is checking the model specification is right or wrong. The ovtest shows when hat is significant in the model (0.0000) which is greater the 5% significance level, the model has error of mathematical formula or omitted variable. The significant hat shows the model is valid. In this model the hat is significant. Therefore the model has no error on its formula and no omission of significant variable.

#### **4.1.1. Interpretation of the logit model**

The regression result of the model shows that the study is over all statistically significant at 95% confidence level and 5% margin error indicated by the p-value (i.e.  $\text{prob} > \chi^2 = 0.0000 < 0.05$ ). Even though the model as a whole is statistically significant not all variables, are independently statistically significant. According to the result attitude (At), sex, entrepreneurship course (Ec) and expectation of success (Sc) are statistically significant at 95% level of significance because their respective p value ( $p > |z| < 0.05$ ). But family income (Fi), risk (R), family business background (FB), CGPA, and remittance (RMT) are statistically insignificant because their p values are greater than 5% at 95% level of significant.

According to the result, the logit model is:

$$\text{Ewg} = -15.60136 + 4.175057\text{At} + 4.080937\text{Sex} + 7.714033\text{EC} + 5.677533\text{SC}$$

$$\text{S.D} = (7.692789) (1.656253) (2.257774) (3.220047) (2.763516)$$

$$P > |z| = (0.043) (0.012) (0.071) (0.014) (0.040)$$

**Attitude:** If a graduate student has a positive attitude towards entrepreneurship, then the log of odd ratio in favor of willingness to be an entrepreneur increase by 4.1 units, *ceteris paribus*. The positive relationship can be explained by the factor that as the attitude of the students become more and more positive, the probability of the students willing to become an entrepreneur increases.

**Sex:** If a graduate student is sex, then the log of odd ratio in favor of willing to be an entrepreneur decreases by 4.0 unit, *ceteris paribus*. The negative relationship explained by the factor as the risk taking of the students increase the probability of the students becoming an entrepreneur decreases.

**Expectation of success:** If a graduate student expectation of success in the future, then the log of odd ratio in favor of willing to be an entrepreneur increases by 5.6 units, *ceteris paribus*. The positive relationship of the variables can be explained by the factor as the expectation for success increases, the probability of the graduates becoming an entrepreneur increases.

**Entrepreneurial course:** If a graduate students took an entrepreneurial training, then the log of odd ratio in favor of willing to be an entrepreneur increases by 7.7 units. The positive relationship by the factor can be explained as the graduate student takes an entrepreneurial course the probability of the graduate becoming an entrepreneur increases.

#### **4.1.2. Marginal effects and its interpretation**

Even though we interpret and discuss the logit and odd ratio result of the regression, the important one for recommendation in logit and probit model is the marginal effect. This is because it is the marginal effect, neither the logit nor the odd ratio, which shows probability

Table 4.3.1 marginal effect after logit

Variable	p> z	Marginal Effects
Attitude	0.000	0.7475037
Sex	0.001	0.7635707
Entrepreneurship course	0.000	0.940600
Success	0.006	0.8806189

Source of own survey, 2019

In terms of marginal effect the model is:

$$Ewg = 0.7475037AT + 0.7635707SEX + 0.9406001EC + 0.8806189SC$$

**Attitude** = if a graduate student has positive attitude towards entrepreneurship, then the probability of to be an entrepreneur increases by 74%, ceteris paribus. Attitude has a positive marginal effect, showing that as the graduates have positive attitude towards self-employment, the probability of the graduates to become an entrepreneur increases.

**Sex** = if a graduate student is sex, then the probability of being an entrepreneur increase by 76%, ceteris paribus. Sex has a positive effect on self-employment showing that as the sex in the graduates increase the probability of becoming an entrepreneur increases.

**Expectation for success** = if graduate student has an expectation of success for the future, then the probability of being an entrepreneur increase by 8.8%, ceteris paribus. It has a positive effect on self-employment showing that as the expectation of the graduates for future success increase the probability of the graduates to become an entrepreneur increases.

**Entrepreneurial course** = if graduate student has taken entrepreneurial course, then the probability of being an entrepreneur increases by 94%, ceteris paribus. It has a positive effect on self-employment showing that when the graduates take an entrepreneurial training the probability of the graduates to become an entrepreneur increases.

The likelihood ratio of test the hypothesis of homoscedasticity is obtained by;

$$LR = 2(\log L_{ur} - \log L_r) \text{ where } LR\text{-likelihood ratio}$$

$L_{ur}$ -likelihood unrestricted

$L_r$ -likelihood restricted

It becomes  $LR = 2(-23.280839 - (-66.18715))$

$$2(-23.280839 + 66.18715)$$

$$2(43.536311) = 87.073$$

This implies that the t calculated value is greater than t tabulated. Therefore null hypothesis is rejected. And alternative hypothesis is accepted. Due to this reason the variable is statically signi

## **CHAPTER FIVE**

### **CONCLUSION AND RECOMMENDATION**

#### **5.1. CONCLUSION**

Graduate unemployment is on the increase in Ethiopia due to lack of job opportunities. Entrepreneurship offers unemployed University graduates a way to become employed and also create jobs. This research is undertaken to identify the determinants of graduate student's willingness to participate in their own business in Wolkite University. So to identify determinants of entrepreneurial willingness to graduates both descriptive analysis such as tables, percentages and frequency and econometric analysis (logistic regression) are used.

Based on the logistic regression attitude, entrepreneurship course, expectation of success and sex positively affect entrepreneurial willingness of graduates, expectation of success affects willingness of graduates significantly and also positively. While remittance from family and risk taking negatively affects willingness of the graduates.

- Attitude of graduate students positively affect graduate students willingness to participate in their own business. Those graduates who have attitude towards entrepreneurship are more willing to participate in their own business.
- The sex composition of graduate students positively and significantly affects the entrepreneurial willingness of graduates. Male graduate students are more willing to be an entrepreneur than females. Females are negatively affected by social and cultural norms to be an entrepreneur. Male rather have leadership and strong motivational thinking to be an entrepreneur.

- Entrepreneurial willingness of graduates is negatively by risk taking behavior of graduates. Risk taker graduate students are not willing to be entrepreneur than risk adverse students since entrepreneurship involves risk taking.
- Entrepreneurial willingness of graduates insignificantly affected by family background, graduate student whose family has business background or self-employed business experience are not willing to be an entrepreneur than others. This is because they feel that they do not have what it takes or in other word experience of their family to become an entrepreneur.
- Entrepreneurship course positively affects entrepreneur willingness of graduates. Those graduates who have taken entrepreneurship course are more willing to be an entrepreneur than those who has not taken entrepreneurship course.
- Entrepreneurial willingness of graduates is also positively and significantly affected by expectation of future success. Those graduate students who expect that they will be success full in the future are relatively willing to be an entrepreneur than others.
- Family income and entrepreneurship education on the other hand are insignificant. Family income is insignificant hence it is not our culture to use family income rather needs own income after graduation. Remittance is also insignificant because entrepreneurship education needs different teaching pedagogy in which entrepreneurship course is linked (dwerry house, 2001) experimental learning (kolb, 1984), action teaching (smith, 2001) and Remittance (gibb, 1999). Entrepreneurship education can be offered in many ways.

If the objectives are to provide understanding of what entrepreneurship is about, the most effective way to achieve this objective is to provide information through public channels such as media, seminar or lectures. These methods are effective to send the relevant information to a broader population. If the objective is to equip individuals with entrepreneurial skills, the best way deliver the education and training is via industrial training. However, if the objective of education is to prepare individuals to act as entrepreneurs, the most effective techniques is to facilitate experiment by trying entrepreneurship out in a controlled environment, such as business simulation or role playing (myffi and O’Gorman ,2004).

## **5.2. Recommendation**

Based on the result attitude of graduate student towards entrepreneurship is a significant determinant of graduate students to participate in their own business so the concerned authority or the universities and higher institution should work more at changing the attitude of students on participating in their own business. They have to make students to have a positive mind set towards entrepreneurship.

Female students are relatively less willing to be an entrepreneur, according to the result. Therefore, the concerned authority should create awareness for females about entrepreneurship to increase their involvement. University should change the attitude of female students to have willing to start own business.

Risk-taking behavior of student is a factor to determine student's willingness to participate in their own business. So the concerned authority should engage in creating awareness how important taking moderate risk is to be an entrepreneur

Family business background affects the entrepreneurial willingness of graduates. This is because if a family is self-employed then students gain knowledge, experience and attitude about self-employment. Therefore, the concerned authority should create awareness to families about the importance of entrepreneurship.

Entrepreneurship course is a significant determinant of graduate student willingness to participate in their-own business. So universities should give entrepreneurship course to students to increase their involvement towards entrepreneurship.

Further studies should investigate the weakness in the educational system and curriculum in Ethiopia In relation to graduates entrepreneurship. Business culture is lacking in most university graduates hence this should be explored further in a study. Further research could expand the study to more universities to improve the generalizability of the study.

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## APPINDEXS

```
. logit ewg fi fb at sex ec r sc cgpa rmt
```

```
Iteration 0: log likelihood = -96.124319
Iteration 1: log likelihood = -12.090239
Iteration 2: log likelihood = -10.27711
Iteration 3: log likelihood = -9.5448075
Iteration 4: log likelihood = -9.4984404
Iteration 5: log likelihood = -9.498001
Iteration 6: log likelihood = -9.4980008
```

```
Logistic regression                               Number of obs   =          140
                                                    LR chi2(9)      =          173.25
                                                    Prob > chi2     =           0.0000
Log likelihood = -9.4980008                       Pseudo R2      =           0.9012
```

ewg	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
fi	.0000658	.0004054	0.16	0.871	-.0007287	.0008603
fb	2.591111	2.329464	1.11	0.266	-1.974554	7.156777
at	4.175057	1.656253	2.52	0.012	.9288616	7.421253
sex	4.080937	2.257774	1.81	0.071	-.3442193	8.506093
ec	7.714033	3.140441	2.46	0.014	1.558881	13.86918
r	4.364306	3.220047	1.36	0.175	-1.946869	10.67548
sc	5.677533	2.763516	2.05	0.040	.2611418	11.09392
cgpa	-.6407182	1.834165	-0.35	0.727	-4.235616	2.95418
rmt	1.870123	1.707203	1.10	0.273	-1.475933	5.216179
_cons	-15.60136	7.692789	-2.03	0.043	-30.67895	-.5237737

. mfx

Marginal effects after logistic

y = Pr(ewg) (predict)  
= .47230647

variable	dy/dx	Std. Err.	z	P> z	[	95% C.I.	]	X
fi	.0000164	.0001	0.16	0.871	-.000181	.000214		2658.5
fb*	.5680716	.38817	1.46	0.143	-.19273	1.32887		.514286
at*	.7475037	.16291	4.59	0.000	.428201	1.06681		.628571
sex*	.7635707	.23201	3.29	0.001	.308838	1.2183		.542857
ec*	.9406001	.07631	12.33	0.000	.791045	1.09016		.607143
r*	.7950918	.28915	2.75	0.006	.228375	1.36181		.514286
sc*	.8806189	.15231	5.78	0.000	.582096	1.17914		.557143
cgpa	-.1596882	.4583	-0.35	0.728	-1.05795	.738571		3.06386
rmt*	.4329935	.33971	1.27	0.202	-.232824	1.09881		.542857

(\*) dy/dx is for discrete change of dummy variable from 0 to 1

. corr  
(obs=140)

	ewg	fi	fb	at	sex	ec	r	sc	cgpa	rmt
ewg	1.0000									
fi	0.6730	1.0000								
fb	0.2557	0.3502	1.0000							
at	0.7134	0.4823	0.1699	1.0000						
sex	0.3942	0.3391	0.0836	0.1848	1.0000					
ec	0.8139	0.5708	0.1839	0.6227	0.2894	1.0000				
r	-0.4061	-0.3976	-0.5441	-0.3034	-0.2607	-0.4306	1.0000			
sc	0.8263	0.6687	0.2557	0.5944	0.3365	0.6667	-0.4061	1.0000		
cgpa	0.5091	0.5088	0.1915	0.3912	0.1398	0.3974	-0.2250	0.5976	1.0000	
rmt	0.5963	0.4487	0.1410	0.4816	0.2516	0.5243	-0.3754	0.5674	0.3994	1.0000

```
. vif
```

Variable	VIF	1/VIF
sc	3.02	0.330648
ec	2.35	0.425038
fi	2.18	0.459198
at	1.86	0.537378
r	1.81	0.553298
rmt	1.67	0.598593
cgpa	1.65	0.604416
fb	1.55	0.645408
sex	1.21	0.825662
Mean VIF	1.92	

```
. ovtest
```

Ramsey RESET test using powers of the fitted values of ewg

Ho: model has no omitted variables

F(3, 127) = 35.90

Prob > F = 0.0000

**WOLKITE UNIVERSTY**  
**COLLAGE OF BUSINESS AND ECONOMICS**  
**DEPARTMENT OF ECONOMICS**

**Questionnaire**

This questionnaire will design by Alafi Nibret to collect information from graduate students Wolkite University for identifying basic factors, which determine graduate students willingness to participate in their own business. This will mainly for partial fulfillment of bachelor of art of degree in economics.

Dear respondents all information you provided will be kept strictly confidential and will not be used for other purpose than for intended research purpose.

Please put the check mark (×) in the box provides provided and write your idea for open ended question.

- 1) Sex:                                   A. male  B. female
- 2) CGPA\_\_\_\_\_
- 3) What is your monthly allowance from family or relatives\_\_\_\_\_
- 4) Your family monthly income is estimated to be-----ETB.
- 5) Distance Your living area from major urban area\_\_\_\_\_
- 6) What is your family's job background?  
A. Father is self-employed

B. Father is employee

C. Mother is self-employed

D. Mother is employee

7) Are you willing to be an entrepreneur after your graduation?

A. Yes

B. NO

8) Please indicate how much you agree or disagree with each of the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Continuous government monthly salary is not enough for me.	1	2	3	4	5
The job market is very challenging	1	2	3	4	5
I do not want anyone to tell me what to do.	1	2	3	4	5

9) What attitude do you have towards self-employment?

A. positive -----

B. negative -----

10) Please indicate how much you agree or disagree with each of the following statements:

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I have skills and capabilities to success in my own business.	1	2	3	4	5

I will get an easy access to financial and infrastructural facilities.	1	2	3	4	5
I will get government support.	1	2	3	4	5
The rules and regulations in the country are encouraging to be self-employed.	1	2	3	4	5

11) Have you take an entrepreneurship course in your campus?

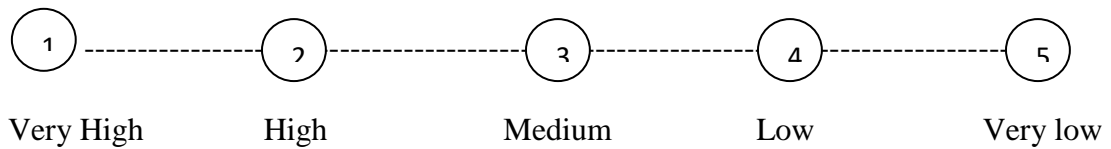
A. Yes

B. No

12) If your answer for the above question is “Yes”, how much did you score?

\_\_\_\_\_

13) How do you measure your risk taking?



14) What do you recommend to students to develop entrepreneurship in Ethiopia?

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