

# Determinant of higher education institutions on promoting students' entrepreneurship across discipline: Evidence from Dire Dawa, Haramaya and Adama University

Hailay Aregawi Hagos (MSc.) \*, Yeshalem Abadi (MBA) \*\*

\*Lecturer, Dire Dawa University, Department of Banking and finance

\*\*Lecturer, Dire Dawa University, Department of Marketing Management

**ABSTRACT-** Recently in Ethiopia, thousands of graduates are producing from higher education institutions each year. As the current capacity of the national labor market of the country cannot provide adequate jobs, many are found unemployed. As a result, higher education institutions are required to produce an entrepreneurial graduates who can create his/her own job rather than waiting to be hired. In relation to this few studies have been conducted which were mainly focused on business and technology students and the impact of entrepreneurship course only. To fill this gap, this study was conducted on various fields of studies with the aim of investigating the factors affecting higher education institutions on promoting student's entrepreneurship across discipline in the case of three selected Universities (Dire Dawa, Haramaya and Adama). For the sake of achieving this objective, primary sources of data were collected through structured questionnaire from a sample of 972 students which were selected using a stratified random sampling technique. Moreover, focus group discussions and interview were conducted. While descriptive narrations through concurrent triangulation strategy were applied to analyze the data collected from focus group discussion and interview, data collected using questionnaire were analyzed using descriptive statistics and econometric model (ordinal logistic regression). Hence, University commitment, curriculum, delivery method, assessment method, learning facility were found significant factors in determining the students' entrepreneurship promotion. Therefore, in collaborating to different stakeholders, higher education institutions should provide wide and continuing programs that promote students' entrepreneurship through opening a center which facilitate the program. Besides, universities should revise and evaluate their curriculum, delivery method, assessment method and learning facility in relation to its role on promoting students' entrepreneurship.

---

Key words: Entrepreneurship, Higher education institution, promotion, students.

## 1. INTRODUCTION

Similar to other disciplines, the concept of entrepreneurship has long history. It is derived from a French verb called "entreprendre" which means to undertake business (Hebert & Link, 1988; Hinddle & Gillin, 1992; Burnett, 2000). Entrepreneurship can be defined as the process of searching opportunities, risk taking, creating new thing, gathering resources, coordinating and organizing of overall activities in order to obtain new thing or make profit (Penrose, 1963; Leibenstein, 1968; Gartner, 1988; Okpara, 2000). Entrepreneur on the other hand is referred as a person who seek opportunities, take risk, able to gather, coordinate and organize resources, and has a motivation and ability to convert idea into action (Knight, 1921; Di-Masi, 2010); Reiss, 2010; Murphy, 2010). Entrepreneurship is now increasingly becoming the heart of a given country's economy. It helps in reducing unemployment rate, improve technologies, carer development, growing micro and small enterprises, enhances positive attitudes such as creativity, flexibility, initiatives and cope with uncertainties (Arokiasamy, 2012). Thus, Countries are incorporated in their policies and design different development strategy on it (Obino et. at, 2012).

Higher education institutions are important actors in learning new things and developing innovation and creativity so that helps students in promoting their entrepreneurship. They are not only expected to teach, produce and exchange knowledge, rather they should also be a place where national and international research, innovation and technology are practiced through their three key missions of teaching, research, and community service. They should be able to prepare students not only as job seekers but mostly as job creators by becoming self employed. They should also produce massive graduates who create competitiveness in the labour market and self-employed (Koschalzky, 2001; Robinson & Malach, 2004; Mok, 2010). They can achieve this through providing entrepreneurship education, creating structures for sharing knowledge with industry, developing new and innovative approaches to teaching entrepreneurship as well as new frameworks to support knowledge transfers to enterprises, commercialize the results of university research by teachers and graduates and to introduce appropriate activities in their own contexts (Jay, 2008).

However, only in recent time higher education begun to be perceived as an instrument of entrepreneurship promotion. Higher education institutions have structured their curriculum and produce graduates to meet the needs of the labor market. However, the current capacity of the national labor market to absorb new entrants is far from sufficient (European Commission, 2008; ILO, 2009). Moreover, higher education institutions face some challenges such as unclear strategies for its incorporation across faculties and insufficient resources and skill manpower in providing their effort on promoting entrepreneurship (Kalimasi, 2010). Thus, there is a need for entrepreneurial response from higher education institutions.

In Ethiopia the higher education institutions have been expanding both in size and outreach. They expand from two public universities in 1991 to more than 35 public universities this time in which they hold more than 500,000 students learning at different fields of studies. Despite the expansions of universities and increment of graduate students, unemployment is high and is one of the socio-economic problems in the country. It has been increasing over time (Martha, 2012; Nebil, et. al, 2010).

As it is reported by Ministry of Education (2013) the number of students who seek to be hired in any private or public organizations is 80 to 90 percent. Besides, as it is reported in the MSEs development agencies, Dire Dawa city administration (2014), in the administration there are more than 10,000 graduates who wait to be hired. Different studies (Brussels, 2012; Byabashaija, et. al, 2010; Charney, et. al, 2000; Hessel, et. al, 2008; Oosterbeek, et. al, 2008)) have also found that the entrepreneurial intention of graduate students is low. This indicates that the graduate students' entrepreneurial know-how is low. Thus, government bodies, higher education institutions, and other concerned bodies are required to do on the promotion of students' entrepreneurship which in turn decrease the rate of unemployment in the country.

A few studies (Brussels, 2012; Byabashaija, et. al, 2010; Charney et. al, 2000; Hessel et. al, 2008; Oosterbeek, et. al, 2008; Negash & Amentie, 2013; Zegeye, 2013; Aschalew, 2015; Mekonnin, 2015) have been conducted in this area (entrepreneurship) particularly, in investigating the students' entrepreneurial intention and attitude. In addition, some studies (Al-mahdi, 2012; Kalimasi, 2010; Koschatzky, 2001; Santos et al, 2012; Zhou & Xu, 2012; Potter, 2008; European Commission, 2008; Mok, 2010) made studies on the role of entrepreneurship education given at higher education on students' entrepreneurship intention and attitude. The focus of these studies were to examine the entrepreneurship program (course) on students' entrepreneurship intention and attitude by taking the field of studies that incorporate the course entrepreneurship as a target group. Like the traditional business model theory, they ignore the other field of studies that do not incorporate entrepreneurship course in their curriculum. However, recently all graduate students are required to create a job regardless of their field of study. Thus, to fill the specified gap this study is needed to conduct with the aim of the following two objectives:

1. To describe the commitment of higher education institutions on promoting students' entrepreneurship across discipline.
2. To investigate the factors affecting the higher education institutions on promoting student's entrepreneurship across discipline in the case of three selected Universities (Dire Dawa, Haramaya and Adama Universities).

## 2. REVIEW OF RELATED LITERATURE

There are various literatures written by scholars on the concept of entrepreneurship. It was first established in America in the early 1700's (Hindle & Gillin, 1992; Hebert & Link, 1988). Then after, various scholars have been given their own definition for the entrepreneurship concept over time. It involves on carrying out of new combinations by a person who called entrepreneurs that characterized as risk-bearers, coordinators, organizers, gap-fillers, leaders, and innovators or creative imitators (Schumpeter, 1951). Okpara (2000) also defines entrepreneurship as the willingness and ability of an individual to seek out investment opportunities in an environment and be able to establish and run an enterprise successfully based on the identifiable opportunities. Entrepreneurship this time is the heart of the modern business. It is becoming a common issue to many people including researchers, governments, scholars, educators and policy makers. Entrepreneurship initiates innovative businesses and create incremental wealth by individuals which generally considered it as a development strategy in many country's sustainable economic development (Obino et. al, 2012).

Higher education institutions are important actors in learning new things and developing innovation and creativity. They are not only expected to teach, produce and exchange knowledge, rather they should also be a place where national and international research, innovation and technology are practiced which in turn helps in developing a country's economy. To this effect, higher education institutions (HEIs) support enterprise creation through their three key missions of research, teaching, and interaction with the wider community. A growing number of institutions are providing entrepreneurship education and creating structures for sharing knowledge with industry (Koschalzky, 2001). Higher education institutions offer and engage in a variety of knowledge transfer activities that promote entrepreneurship, either directly or indirectly. To this effect, they can help individuals to start new firm and transfer knowledge to enterprises in the regions in which they are located in (Jay, 2008). As a result, higher education institutions this time are required to offer entrepreneurship education and other activities that can help graduates in developing their entrepreneurship education. The expected outcome of entrepreneurship education is entrepreneurship capacities which constitute the necessary and sufficient conditions to practice entrepreneurial behavior in response to socio-economic challenges (Gibb, 1998).

Researchers (Hassan, 2012; Negash & Amentie, 2013; Aschalew, 2016) report that the proposition that the intention to become self-employed is positively and significantly correlated to the attitudes of self-employed and to the perceived behavioral control. Chukwujiokwe et al. (2013) also indicated that entrepreneurial intentions increased with increase in age. Besides, perceived self-efficacy, family background, risk taking propensity and proactive personality are the factors that can affect their entrepreneurial intentions (Mekonnin, 2015; Aschalew, 2016). Supportive university environment is very important to develop entrepreneurial intentions among university's students as well as unclear strategies for its incorporation across faculties and insufficient resources are the main challenges facing on promoting students' entrepreneurship (Kalimasi, 2010; Negash & Amentie, 2013; Mekonnin, 2015; Zegeye, 2013). Studies (Hassan, 2012; Byabashaija et al., 2010; Negash & Amentie, 2013) people who are important to someone and closest family and partners were significantly determines once intention toward self-employment.

Some studies (Hassan, 2012; Brussels, 2012; Charney et al., 2000; Yi et al., 2014; Negash & Amentie, 2013; Mekonnin, 2015; Aschalew, 2016) revealed that entrepreneurship education has a positive impact on the entrepreneurial mindset of young people, their intentions towards entrepreneurship, their employability and finally on their role in society and the economy. On the other

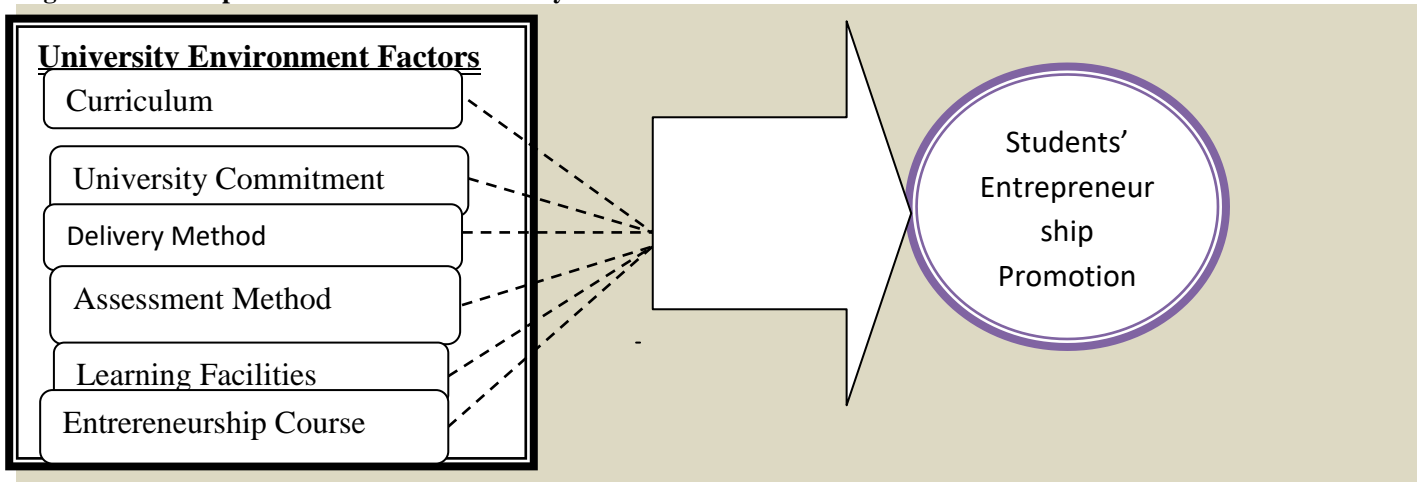
hand, the result of other studies (Oosterbeek et al., 2008; Hessel et al., 2008) shows that the program does not have the intended effects: the effect on students' self-assessed entrepreneurial skills is insignificant and the effect on the intention to become an entrepreneur is even significantly negative. In fact, there is a negative correlation between education and entrepreneurship. The more educated a person, the less likely she or he is to act as an entrepreneur (Arenius et. al, 2004).

Entrepreneurial activities may be explained by the influences of the surrounding business environment such as government policy, availability of logistic infrastructure, financial support, and externalities. In additions physical infrastructure, corporate physical assets, R&D laboratories and intangible (human capital,) Education, Skills and training opportunities can foster entrepreneurial intention (Negash & Amentie, 2013). Expected opportunities are also the other factors that can determine students' entrepreneurship development (Mekonnin, 2015). According to Kristiansens and Indart (2004) lack of access to capital and credit scheme, and the constraints of financial systems are regarded by potential entrepreneur as main hindrances to business innovation and success in developing economies.

**2.1. Conceptual Framework of the Study**

In line to the theretical and emprical reviews discussed above, the conceptual framework of the study is given below:

**Figure 2.1: Conceptual Framework of the Study**



Source: Researcher's own design (2016)

**3. RESEARCH METHODOLOGY**

The type of research employed under this study was both explanatory and descriptive researches. The target population of the study includes students engaged in various departments as well as management bodies from three selected Universities (Dire Dawa, Haramaya and Adama). To get sufficient and reliable data, the study was incorporated only those students who are at the graduate level. In this study a firsthand qualitative data were collected using primary sources including questionnaire, interview and focused group discussions on a cross-sectional basis. Both close ended and open ended structured questionnaires were prepared and personally distributed by the enumerators for the respondents (students). Further an interview was also conducted with some management bodies of each University specially to describe the commitment of universities on promoting students entrepreneurship. In support to the questionnaire and interview, focused group discussions were also made with some selected student respondents.

In this paper, three universities (Dire Dawa, Haramaya and Adama universities) were conveniently selected. Within each university there were many students who learn at different departments. As a result, in order to avoid the biasness of results occur by concentrating in few selected departments and to generate more accurate results by giving the chance to be included each respondents within a given department, stratified random sampling technique was applied. With this technique, the sampling frame was organized in to relatively homogeneous groups or strata (i.e. based on the departments). Then by applying the simple random sampling technique, the total sample was selected from each stratum (department) proportionally. Finally, after obtaining the total populaion, 972 (i.e. 335, 374 and 356 from Dire Dawa Haramaya and Adama University respectively) sample

respondents were selected by applying a simplified scientific formula provided by yemane (1997) i.e.  $n = \frac{N}{1 + N(e)^2}$  in which

e is the level of precision at 5% level of significance.

Once the raw data were processed, they were analyzed using both descriptive and inferential statistical tools. In line to the specific objectives, the collected data were initially analyzed using descriptive analysis techniques such as frequency distribution and statistical measures. Besides, descriptive narration through concurrent triangulation strategy was applied for analyzing the data collected from interview and focus group discussions. Beyond the descriptive analysis, an econometric model which is ordinal logit model was used particularly to test the relationship between the dependent and independent variables and to draw conclusions. Stata, version 11.2 software was used to run the result of the statistical result and the model. In this study the

promotion of students' entrepreneurship is dependent variable which is measured by five point likert scale (i.e. highly promoted, promoted, undecided, low promoted and very low promoted). The explanatory variables of the study on the other hand includes curriculum, university commitment, delivery method, assessment method, learning facility, entrepreneurship course and field of study. The derived equation of the model in this study which is the function of dependent variable to various explanatory variables is given as:

$$Y_i = \beta_0 + \beta_{1CU} + \beta_{2UC} + \beta_{3DM} + \beta_{4AM} + \beta_{5SLF} + \beta_{6EN} + \beta_{7FS} + \epsilon_i$$

#### 4. RESULT AND DISCUSSION

As it is clearly discussed in the methodology part of the study, 1,065 students were selected as a sample from three universities (335 from Dire Dawa, 374 from Haramaya and 356 from Adama University) who involved across 45 departments. In doing so, 1,065 questionnaires were distributed to respondents by the enumerators. However, at the time of counting and checking the collected questionnaires, 56 questionnaires were found unreturned due to different reasons and 37 questionnaires were found incomplete. This shows that 93 (8.7 percent) questionnaires were excluded from the analysis. In other words, the analysis of this paper is based on a response rate of 91.3 percent. Besides, a focus group discussions with some selected students and an interview questions with some management bodies of the universities were undertaken both at the time of questionnaire distribution and collection. Therefore, data were analyzed based on the data collected using questionnaires from 972 respondents as well as data collected through interview questions and focus group discussions.

#### 4.1. Descriptive Analysis and Discussion

##### 4.1.1. Commitment of Higher Education Institutions on Promoting Students' Entrepreneurship

In this study, to describe the prevalence commitment of higher education institutions on promoting students' entrepreneurship, data were collected from three universities (Dire Dawa, Adama and Haramaya Universities) through questionnaire and focus group discussion with students as well as interview questions with few management bodies. In relation to the first method (questionnaire), the following results were obtained.

**Table 1: Commitment of Higher Education Institutions on Promoting Students' Entrepreneurship**

No.	Question/variable	Category	Frequency Distribution	
			Number	Percent (%)
1	Do you think that your university has been exerting efforts on promoting your entrepreneurship skill?	Yes	225	23
		No	747	77
		Total	972	100
2	Types of effort	Providing training	204	91
		Arranging conferences, seminars and workshops on entrepreneurship	-	-
		Entrepreneurship day/week	-	-
		Guest lecture/speaker	-	-
		Linkage with industry	21	9
		Motivating entrepreneur	-	-
		Other, specify	-	-
Total	225	100		
3	Level of university commitment	High	104	11
		Medium	152	15
		Low	716	74
		Total	972	100

Source: Own survey (2015)

As it is shown in the above table (table 1), majority (77 percent) of the respondents disagree with the commitment of their university on promoting their entrepreneurship skill, while the remaining (23 percent) of the respondents agree with it. For the respondents who agreed with the university commitments were also required to state some of the commitments that their university exerts on promoting of their entrepreneurship. In response, almost all (91 percent) of them agreed with the training that the university provide to students. However, a few (9 percent) respondents agreed with the university linkage to surrounding industries. As it is indicated in the same table, item 3, respondents were also required to rate their university' commitment on promoting students entrepreneurship on three point likert scale (High, Medium or Low). Accordingly, most (74 percent) of them were evaluated as low, while the remaining 15 percent and 11 percent were evaluated as medium and high respectively. From this we can understand that even if some respondents agreed with universities providing entrepreneurship training and made industry linkage as means of promoting students entrepreneurship, majority of the respondents did not agree that universities are exerting commitments for promoting students' entrepreneurship.

In line to the above questions, focus group discussions were also made with some selected respondents (students) at each university. They particularly requested to discuss on whether universities are exerting commitments on promoting students' entrepreneurship and to specify some of the commitments (if any) that have been exerting so far. Accordingly, the response of the participants is summarized in the following two paragraphs.

- ❖ Almost all of the participants were disagreed with the commitment of universities on promoting students' entrepreneurship. Some of them said that "even though we learn the course entrepreneurship, we have not got any difference from the other courses. We learn it like the other courses and similarly we score a given grade". Besides, participants from some departments of business and economics as well as technology institute reported that "we take a practical attachment (apprentiship) in different service and manufacturing industries for few days usually 15 days to 30 days". This is given with the aim of looking the theoretical parties that they have learnt in practice. However, as the participants indicated it is not undertaken properly so that it may not help in promoting students' entrepreneurship. In contrast, some participants especially those who come from law and other social science were reported as they were not even learn the course entrepreneurship; this is our first time to hear it.
- ❖ On the other hand, a few participants were agreed with the commitment of universities on promoting students' entrepreneurship. They reported that currently universities are beginning to exert commitments through offering training that aims at promoting students' entrepreneurship skill. This is from the program that they observed while the university providing at the end of last few academic years. As a result, they were also waiting to get that training at the end of their academic year. Besides, they were raised the practical attachment given for few days as a means of promoting students' entrepreneurship.

In addition, an interview were also made with a few management bodies of the selected universities for collecting data on whether their universities are exerting commitments on promoting students entrepreneurship. Accordingly, the response to which is described with respect to each university as follows. Based on the report from Dire Dawa University' interviewee, the university gives training at the end of each academic year for graduate students with the aim of promoting their entrepreneurship skills. It is also reported that students' entrepreneurship is expected to be promoted through learning of each courses as well as the practical learning that they may obtained from practical attachments which given for some days in different industries. Besides, the university is on the process of establishing an incubation center. However, the university is found weak in arranging conferences, seminars and workshops on entrepreneurship, entrepreneurship day/week, guest lecture/speaker and motivating entrepreneur/innovators. Hence, even if there are some trying the university is weak on providing different activities and programs that may promote students' entrepreneurship.

Based on the report from Adama and Haramaya universities interview, similarly both universities provide entrepreneurship training for graduate students at the end of an academic year. Unlike to Dire Dawa University, both universities (Adama and Haramaya universities) already established an incubation center that facilitates an entrepreneurship program. However, the center is weak on offering different activities that may promote students' entrepreneurship. Besides, both universities are found weak on offering entrepreneurship programs such as conferences, seminars and workshops on entrepreneurship, entrepreneurship day/week, guest lecture/speaker and motivating entrepreneur/innovators. In relation to the overall university commitment level, interviewees were responded their university commitment as "low".

#### 4.1.2. Factors Affecting Students' Entrepreneurship Promotion

Taking the university environment specifically, in this study an investigation was made in relation to curriculum, delivery method, assessment method, learning facility, university commitment and entrepreneurship course as the factors affecting students' entrepreneurship promotion. For the sake of easily presenting, these factors were organized in to two parts. The first part includes the factors such as curriculum, delivery method, assessment method and learning facility whereas the second part includes the remaining factors (university commitment and entrepreneurship course).

#### Curriculum, Delivery Method, Assessment Method and Learning Facility Related Factors

In this study curriculum, delivery method, assessment method and learning facility were taken as the factors that can affect students' entrepreneurship promotion. To examine the effect of these factors, respondents were asked to give their opinion based on five point likert scale questions (i.e. 5 = strongly agree, 4 = agree, 3 = undecided, 2 = disagree, and 1 = strongly disagree) on different related variables of the factors. Table 2 summarizes the average, standard deviation, minimum and maximum of the respondent's response on each of the specific variables.

**Table 4.6: Curriculum, delivery method, assessment method and faculty related factors on students' entrepreneurship promotion**

No.	Factors/Variables	Mean	SD	Min	Max
1	<b>Curriculum related factors</b>				
	Curriculum is not up dated in relation to current situation	4.5	0.7	1	5
	Course content of the curriculum are not learner centered and oriented to real life situation	4.2	0.8	1	5

	The curriculum does not incorporates students' team and organizational works	4.3	0.8	1	5
	The curriculum does not incorporates use of problem based learning	4.4	0.7	1	5
	The curriculum does not incorporates use of students' collaborative project work	4.4	0.8	1	5
	The curriculum does not incorporates use of students' field trip	4.2	0.9	1	5
	The curriculum is designed to meet the needs of the labor market	4.6	0.7	1	5
	The curriculum excludes relevant courses	4	0.9	1	5
	The curriculum includes irrelevant courses	4	0.9	1	5
	<b>Grand</b>	<b>4.3</b>	<b>0.3</b>	<b>3.3</b>	<b>5</b>
<b>2</b>	<b>Course Delivery Method Related Factors</b>				
	Instructors focused on lecturing of theoretical part	4.6	0.5	2	5
	Instructors focused on covering of topics rather than equipping students with real world	4.7	0.5	2	5
	Instructors have not capacity to convert theory to practice	4	0.9	1	5
	Instructors have not enough experience to teach the courses	4	0.8	1	5
	Instructors have not commitment to equipped students with entrepreneurship	3.8	1	1	5
	Instructors follow direct lecture method	4.5	0.7	1	5
	Instructors cover large portion per class	4.5	0.7	1	5
	<b>Grand</b>	<b>4.3</b>	<b>0.3</b>	<b>3.3</b>	<b>5</b>
<b>3</b>	<b>Assessment Method</b>				
	Instructors assess us to fulfill the grade	4	1	1	5
	Instructors follow irrelevant assessment method	4.3	0.8	1	5
	The way of asking are not related to practice	4.1	0.9	1	5
	The nature of the assessment are not appropriate	3.5	1.5	1	5
	The content/part of the assessment are not varied	3.5	1.5	1	5
	<b>Grand</b>	<b>3.9</b>	<b>0.5</b>	<b>2</b>	<b>5</b>
<b>4</b>	<b>Learning facility factors</b>				
	Inadequate learning facilities	4.4	0.7	2	5
	The available learning facilities are out dated	3.2	1.4	1	5
	Lack of manpower to undertake the facilities	3.5	1.2	1	5
	Inadequate class rooms	4	0.9	1	5
	<b>Grand</b>	<b>3.8</b>	<b>0.6</b>	<b>1.75</b>	<b>5</b>

Source: Own survey (2015)

As indicated in table 2 the mean responses of respondents to the factors revision of curriculum to current situation, course contents of curriculum, inclusion of students' team and organizational works, problem based learning, students' collaborative

project work, students' field trip, labor market, exclusion of relevant courses and inclusion of irrelevant courses were 4.5, 4.2, 4.3, 4.4, 4.4, 4.2, 4.6, 4, and 4 with a standard deviation of 0.7, 0.8, 0.8, 0.7, 0.8, 0.9, 0.7, 0.9 and 0.9 respectively. Based on this "curriculum is designed to meet the needs of the labor market" was the foremost factor affecting students' entrepreneurship promotion which followed by "curriculum is not up dated in relation to current situation, curriculum does not incorporates use of problem based learning and curriculum does not incorporates use of students' collaborative project work". On the other hand, the exclusion of relevant courses and inclusion of irrelevant courses were the least factor affecting the students' entrepreneurship promotion. The total average effect of these variables related to curriculum on students' entrepreneurship promotion was seen as 4.3 at a standard deviation of 0.3.

As it is shown in table 2, item 2, course delivery method is the second variable that expected to affect students' entrepreneurship promotion. The average result of instructors focused on lecturing of theoretical part, instructors focused on covering of topics rather than equipping students with real world, instructors have not capacity to convert theory to practice, instructors have not enough experience to teach the courses, instructors have not commitment to equipped students with entrepreneurship and instructors cover large portion per class was 4.6, 4.7, 4, 4, 3.8, 4.5 and 4.5 with the given respective standard deviation respectively. From this we can understand that "instructors focused on covering of topics rather than equipping students with real world" was the foremost factor affecting students' entrepreneurship promotion which followed by "instructors focused on lecturing of theoretical part". On the other hand, "instructors have not commitment to equipped students with entrepreneurship" was the least factor affecting the students' entrepreneurship promotion. To sum up, the total average effect of these variables related to course delivery method on students' entrepreneurship promotion was given as 4.3 at a standard deviation of 0.3.

Assessment method was also the other factors which expected to affect the students' entrepreneurship promotion. The result presented in table 2, item 3 shows that "following of inappropriate assessment method" was the main factor which accounts a response rate of 4.3 and at a standard deviation of 0.8. This followed with the variables of "the way of asking are not related to practice, instructors assess us to fulfill the grade, the nature of the assessment are not appropriate and the content/part of the assessment are not varied" which accounts a mean of 4.1, 4, 3.5 and 3.5 with a standard deviation of 0.9, 1, 1.5 and 1.5 respectively. On average the assessment method variable was found as a significant factor affecting the students' entrepreneurship promotion at a mean and standard deviation of 3.9 and 0.5 respectively.

Learning facility was the last but not the least variable in this category which expected to have a relationship with students' entrepreneurship promotion. As revealed in table 2, item 4, out of the given four specific variables, inadequate learning facilities have the highest effect on students' entrepreneurship promotion which accounts 4.4 average response rates and standard deviation of 0.7. It followed with inadequate class room at an average response rate of 4 and standard deviation of 0.9. The remaining variables including "lack of manpower to undertake the facilities and the available learning facilities are out dated" were significant at a response rate of 3.5 and 3.2 with a standard deviation of 1.2 and 1.4 respectively. Generally, learning facility factor which is described with the above specified variables have a positive significant effect on the students' entrepreneurship promotion at a grand average of 3.8 with a standard deviation of 0.6.

Even though all of the aforementioned factors discussed above are positively affecting the students' entrepreneurship promotion, it does not mean that all factors have equal impact. As it is clearly shown in table 3, curriculum and course delivery method related factors were the two topmost factors that affect the students' entrepreneurship promotion in the selected area. This followed by assessment method and learning facilities related factors.

**Table 3: Comparison of the specified factors on students' entrepreneurship promotion**

No.	Factors	Mean	Standard deviation	Rank
1	Curriculum	4.3	0.3	1
2	Course delivery methods	4.3	0.3	1
3	Assessment methods	3.9	0.5	3
4	Learning facility	3.8	0.6	4

**Source:** Own survey (2015)

**University Commitment and Entrepreneurship course**

These variables were also the other factors that expected to affect students' entrepreneurship promotion. To explain the effect of university commitment on students' entrepreneurship promotion, respondents were initially required to rate the prevalent commitment of university on promoting students' entrepreneurship and then create the relationship with their scale of entrepreneurship promotion. As it can be seen in the below table (table 4), most (74 percent) of them were evaluated as low, while the remaining 15 percent and 11 percent were evaluated as medium and high respectively.

With regard to entrepreneurship course, respondents were required to state whether they have taken an entrepreneurship course or not. To this effect, almost half (50.5%) of the respondents were taken the course entrepreneurship and the remaining (49.5%)

were not taken the course. Again to explain the effect of entrepreneurship course on students' entrepreneurship promotion, the result is run in relation to their entrepreneurship promotion level. Table 4 summarizes the respondents' response to each variable and its effect on students' entrepreneurship promotion.

**Table 4.8: Students' entrepreneurship promotion in relation to University Commitment and Entrepreneurship course**

Variable	Category	Observation		Entrepreneurship Promotion				
		No.	%	H Pro	Pro	Und	L Pro	V L Pro
1. Level of university commitment	High	104	11	53	41	7	2	1
	Medium	152	15	7	18	80	41	6
	Low	716	74	5	11	52	375	273
	<b>Total</b>	<b>972</b>	<b>100</b>	<b>65</b>	<b>70</b>	<b>139</b>	<b>418</b>	<b>280</b>
2. Taking of entrepreneurship course	Yes	490	50.5	59	56	85	209	81
	No	482	49.5	6	14	54	209	199
	<b>Total</b>	<b>972</b>	<b>100</b>	<b>65</b>	<b>70</b>	<b>139</b>	<b>418</b>	<b>280</b>

Source: Own survey (2015)

As it is depicted in the above table (table 4), there is positive relationship between university commitment and students' entrepreneurship promotion. For instance, almost all (94) of the respondents who responded "High" with university commitment were said highly promoted and promoted, while the remaining 3 respondents who said "High" showed low and very low promotion. On the other hand, most (648) of the respondents who agreed with low level of university commitment were said low and very low promotion. As it is seen in the same table item 2, there is also a positive relationship between taking of entrepreneurship course and students' entrepreneurship promotion. For instance, when we compare the respondents who said "highly promoted" 56 of them were taken the course and 6 of them were not taken it. On the other hand, for those who said "very low promoted" 199 of them were not taken the course, while 81 of them were taken the course.

#### 4.2. Regression Analysis

Beyond the descriptive statistical analysis discussed above, in this study an econometric model (ordinal logistic regression analysis) was also used particularly to test the statistical significance of each independent variable on explaining the dependent variable. For explanatory variables such as university commitment and entrepreneurship course, dummy variables were created. And for those variables which measured using five point likert scales (i.e. curriculum, delivery method, assessment method and learning facility) were reduced to two categories: "agree and disagree" based on the mid point. That is the average response of respondents less than 2.5 were categorized as "disagree" and the average response of respondents greater than or equal to 2.5 were categorized as "agree". This is mainly for the sake of easily managing the variables of the study.

##### 4.2.1. Result of the Model (Ordinal Logistic Regression)

After variables were ready in type, code and value, the next activity is regressing of the dependent variable against the independent variables with the help of stata command. To obtain the result of the model, two stata commands were run. The first command shows the coefficient of ordered log-odds and the second command shows the coefficients in terms of proportional odds. Table 4 generally summarizes the two results (marginal effect and odds ratio) of the model.

**Table 5: Result of the model (Ordinal Logistic Regression)**

			Number of obs = 972
			LR chi2(7) = 1119.22
			Prob > chi2 = 0.0000
			Pseudo R2 = 0.4203
promoLikert	Marginal effect	P>(z)	Odds ratio
UC			
Medium	1.064786	0.0003**	2.900218
Low	3.214982	0.000*	24.90283
Curriculum			
Agree	3.998849	0.000*	54.53535
Delivery method			
agree	4.158185	0.000*	63.95534
Assessment method			
Agree	1.039336	0.001*	2.82734
Learning facility			
Agree	1.751281	0.000*	5.761982



<b>Entrepreneurshipcourse</b>			
<b>No</b>	<b>.8861596</b>	<b>0.000*</b>	<b>2.425796</b>
<b>/cut1</b>	<b>2.291771</b>		<b>2.291771</b>
<b>/cut2</b>	<b>5.817447</b>		<b>5.817447</b>
<b>/cut3</b>	<b>11.596</b>		<b>11.596</b>
<b>/cut4</b>	<b>15.04208</b>		<b>15.04208</b>

**Source:** Ordinal Logistic Regression result from own survey (2015)

#### 4.2.2. Interpretation and Discussion of the Result of the Model

Before interpreting and discussing the result of the model, different tests were run to check whether proportional odds assumption and some classical linear regression model assumptions were fulfilled. At the top of the output we see the number of observations (972) used in the ordered logistic regression. The other figure seen in the output is the Likelihood Ratio (LR) Chi-Square test that shows at least one of the predictors' regression coefficient is not equal to zero in the model. The number in the parenthesis indicates the degrees of freedom of the Chi-Square distribution used to test the LR Chi-Square statistic and is defined by the number of predictors in the model. The p-value of 0.0000 also tells us that our model as a whole is statistically significant. The pseudo-R-squared is also given. The first item (promoLikert) shown on the first column of the out puts is the dependent variable of the model and the remaining list of items on that column are the predictors of the model. The result of the coefficients (ordered log-odds and proportional odds) of each variable are used to interpret the effect of each explanatory variables on dependent variable.

University commitment was one of the variables incorporated in this study. As it is revealed in table 5, coefficients of ordered log-odds (marginal effect) and proportional odds (odds ratio) is given for those who said medium and low with the level of university commitment, while the response for high is considered as a reference criteria. As a result, the coefficients of ordered log-odds and proportional odds for those who said medium are 1.065 and 2.9 respectively; and coefficients of ordered log-odds and proportional odds for those who said low are 3.2 and 24.9 respectively. This indicates that the ordered logit for those who said medium university commitment being in a lower entrepreneurship promotion is 1.065 higher than those who said high university commitment, given other variables held constant. In other words, other things remain constant, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) of those who said medium is 2.9 times lower than those who said high or the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 2.9 times lower for those who said medium compared to those who said high, given the other variables are held constant.

With regard to the second predictor (low) of the variable, other variables held constant, the ordered logit for those who replied low university commitment being in a lower entrepreneurship promotion is 3.2 higher than those who replied high university commitment. With the result of the proportional odd, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) of those who replied low is 24.9 times lower than those who said high or the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 24.9 times lower for those who said low compared to those who said high, given the other variables are held constant.

The coefficients of ordered log-odds and proportional odds of those who agree with the curriculum related problem is given as 4 and 54.5 respectively. This implies that other things remain constant, the ordered logit for those who agreed with the curriculum related problem being in a lower entrepreneurship promotion is 4 higher than those who didn't agree. Based on proportion odds, the result of the model shows that for those who agreed with the curriculum related problem, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) are 54.5 times lower than those who didn't agree, given the other variables are held constant. Likewise, the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 54.5 times lower for those who agreed compared to those who didn't agree, given the other variables are held constant in the model.

As it is shown on table 5, the coefficients of ordered log-odds and proportional odds of those who agree with regard to delivery method factor are 4.2 and 64 respectively. This means that other things remain constant, the ordered logit for those who agreed with regard to delivery method factor being in a lower entrepreneurship promotion is 4.2 higher than those who didn't agree. In relation to proportion odds the result of the model shows that for those who agreed, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) are 64 times lower than those who didn't agree, given the other variables are held constant. Likewise, the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 64 times lower for those who agreed compared to those who didn't agree, given the other variables are held constant in the model.

Furthermore, assessment method was also found positively significant at 1 percent level of significance. Its coefficients of ordered log-odds and proportional odds of those who agreed were 1.04 and 2.8 respectively (see table 10). This implies that other things remain constant; the ordered logit for those who agreed with assessment method related problems being in a lower entrepreneurship promotion is 1.04 higher than those who didn't agree. Based on proportion odds the result of the model shows that for those who agreed, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) are 2.9 times lower than those who didn't agree, given the other variables are held constant. Likewise, the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 2.9 times lower for those who agreed compared to those who didn't agree, given the other variables are held constant in the model.

promoted is 2.9 times lower for those who agreed compared to those who didn't agree, given the other variables are held constant in the model.

Availability of learning facility was another variable used in this study. As per table 5, the coefficients of ordered log-odds and proportional odds of those who agree with regard to learning facility variable are 1.8 and 5.8 respectively. This can be interpreted as other things remain constant, the ordered logit for those who agreed with regard to learning facility variable being in a lower entrepreneurship promotion is 1.8 higher than those who didn't agree. In relation to proportion odds the result of the model shows that for those who agreed, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) are 5.8 times lower than those who didn't agree, given the other variables are held constant. Likewise, the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 5.8 times lower for those who agreed compared to those who didn't agree, given the other variables are held constant in the model.

Finally, entrepreneurship course was the last variable which affects students' entrepreneurship promotion at 1 percent level of significance. Its coefficients of ordered log-odds and proportional odds of those who said "no" were 0.88 and 2.4 respectively (see table 5). This implies that other things remain constant; the ordered logit of those who didn't take the course entrepreneurship course being in a lower entrepreneurship promotion is 0.88 higher than those who taken it. Based on proportion odds, the result of the model shows that those who didn't take the course entrepreneurship course, the odds of highly promoted versus the combined other low categories (promoted, neutral, low promoted and very low promoted) were 2.4 times lower than those who taken it, given the other variables are held constant. Likewise, the odds of the combined categories of highly promoted, promoted, neutral and low promoted versus very low promoted is 2.4 times lower of those who didn't take the course entrepreneurship course compared to those who taken it, given the other variables are held constant in the model. Generally, based on the above inferential analysis curriculum, delivery method, assessment method, learning facility, university commitment and entrepreneurship course were found statistically significant factors that determine students' entrepreneurship promotion.

## 5. CONCLUSION AND RECOMMENDATION

### Conclusion

Although universities provide entrepreneurship training for graduate students, arrange a practical attachment for students and try to establish an incubation center that may help to facilitate the activities of entrepreneurship program, respondents agreed that many activities are remained uncovered that can help students on promoting their entrepreneurship. The surveyed higher education institutions' commitment on promoting students' entrepreneurship is low. The lower the commitment of higher education institutions on promoting students' entrepreneurship leads lower scale of students' entrepreneurship promotion. The curriculum related factors including "curriculum is designed to meet the needs of the labor market, curriculum is not up dated in relation to current situation, and curriculum does not incorporates use of problem based learning and use of students' collaborative project work" were the foremost factor affecting students' entrepreneurship promotion. Thus, it is found as a significant factor affecting the students' entrepreneurship promotion.

Instructors' focusing on lecturing of theoretical part, covering of topics rather than equipping students with real world, low capacity, experience, and commitment to convert theory to practice, and covering of large portion per class were the course delivery related factors that may lowering the students' entrepreneurship promotion. The assessment method related factors including following of inappropriate assessment method, the way of asking are not related to practice, instructors assess us to fulfill the grade, the nature of the assessment are not appropriate and the content/part of the assessment are not varied were also the other factors that can significantly affecting the students' entrepreneurship promotion. In addition, learning facilities related factors such as inadequate learning facilities, inadequate class room, lack of manpower to undertake the facilities and the available learning facilities are out dated were the other factor affecting students' entrepreneurship promotion. Students who take the course entrepreneurship have high probability of promoting their entrepreneurship than those who didn't take that course.

### Recommendation

Higher education institutions should provide different entrepreneurship programs that promote students entrepreneurship skill. They should establish and strengthen an incubation center that facilitates and promote entrepreneurship activities for students. They should begin an entrepreneurship clubs, day, week. Other programs such as motivation, workshop, guest lecture and experience sharing should be arranged. Curriculum should be continuously revised in a way that can promote students' entrepreneurship instead of solely meeting the labour market. Various teaching methods such as cooperative work, company visit, practitioner work, guest lecturer should be included in teaching of a given course. Students should also be assessed in a way that can promote their skill of entrepreneurship rather than fulfilling any grade points. Higher education institutions should also provide adequate and updated learning facilities. Higher education institutions should give emphasis on the way of delivering the course and expand to all programs. Students should be given trainings, guest lectures and experience of entrepreneurs while they are teaching that course as well as they should be assessed on more practical way. Finally, policy makers in general and higher education institutions in particular should design a policy that students continuously applied in line to their regular teaching learning process. Students should be given guidelines that can motivate them to cooperate, save capital and generate idea while they are in campus so that they will directly convert their idea in to practice once they graduated.

## REFERENCE

- Ajzen, I. (1991). The Theory of Planned Behaviour, *Organizational Behaviour and Human Decision Processes*, (50), 179-211.
- Al-mahdi, H. (2012). The role of higher education in promoting entrepreneurship education in Saudi Arabia.
- Arenius, P. (2004). "Women in Entrepreneurship". The Entrepreneurial intentions: Some approaches and empirical evidence. *European Journal of Work and Organizational Psychology*.
- Arokiasamy, A. (2012). The role of higher education in promoting entrepreneurship in Malaysia. *Asian Journal of Management Research*, 227(2), ISSN 2229 – 3795. Perak, Malaysia.
- Aschalew, M. (2016). Analysis on determinants of students self employment intention in newly established Universities of Ethiopia. *International Journal of Scientific and Research Publications*, Volume 6, Issue 4, April 2016; 393 ISSN 2250-3153
- Brussels (2012). Effects and impact of entrepreneurship programmes in higher education, Entrepreneurship Unit Directorate-General for Enterprise and Industry, European Commission
- Burnett, D. (2000). "Hunting for Heffalumps: The Supply of Entrepreneurship and Economic Development". *technopreneurial.com*. September. <http://www.technopreneurial.com/articles/history.asp>.
- Byabashaija, W., Isaac Katono, I., & Robert Isabalija, R. (2010). The Impact of College Entrepreneurial Education on Entrepreneurial Attitudes and Intention to Start a Business in Uganda.
- Central Statistical Agency (2014). Ethiopia unemployment rate.
- Charney, A., Libecap, G., and Eller, K. (2000). The impact of entrepreneurship education: an evaluation of the Berger entrepreneurship program at the University of Arizona. University of Arizona.
- Chukwujioko, K., Oriemgbe, G. and Owocho, M. (2013). Factors influencing entrepreneurial intentions among graduates of Nigerian tertiary institutions. *International Journal of Business and Management Invention* ISSN (Online): 2319 – 8028, ISSN (Print): 2319 – 801X, www.ijbmi.org Volume 2 Issue 4 | April. 2013| PP.36-44
- Di-Masi, Paul (2010). "Defining Entrepreneurship".
- European Commission (2008). Best procedure project: "entrepreneurship in higher education, especially in non-business studies" final report of the expert group.
- Gartner W B [1998]; Who is an entrepreneur? "America small Business journal.
- Hebert, R. F. and Link, A. N. (1989). In Search of the Meaning of Entrepreneurship, USA
- Hessel, O., van, M., and Auke, I. (2008). The impact of entrepreneurship education on entrepreneurship competencies and intentions: An evaluation of the Junior Achievement Student Mini-Company Program. Jena economic research papers.
- Hiddle K. G. and Gillin, L. M. (1992). Entrepreneurship: Industry policy priorities and entrepreneurial education in Australia, in *Internationalizing Entrepreneurship Education and Training*, edited by Klandt H. and MullerBoling, P.
- International Labor Organization (ILO), (2009). Supporting Entrepreneurship Education, *A report on the Global Outreach of the ILO's Know about Business Program*, Geneva.
- Jay M. (2008). Entrepreneurship and Higher Education: Towards an Analytical Framework for Policy Development, University of Essex, United Kingdom
- Kalimasi, P. (2010). Role of higher education in promoting entrepreneurship education across disciplines in Tanzania. Mzumbe University, Morogoro.
- Knight, F. (1921) Evolution of Entrepreneurship".
- Koschatzky, K. (2001). The role of higher education institutions for entrepreneurship stimulation in regional innovation systems: Evidence from the network-oriented "EXIST promotion of university based startups" programme in Germany, institute systems and innovation research ISSN 1438-9843.
- Kristiansen, S. & N. Indart (2004): Entrepreneurial Intentions among Indonesian and Norwegian Students", *Enterprising Culture*.
- Leibenstein, H. (1968). Evolution of Entrepreneurship".
- Martha, K. (2012). Employment Challenges in Ethiopia. Addis Ababa University, Ethiopia, martha.kibru@gmail.com
- Mekonnen, R. (2015). Determining Entrepreneurial Motivation of Undergraduate Students in Ethiopian Higher Learning Institutions: A Case of Haramaya University; *Middle Eastern & African Journal of Educational Research*, Issue 14, Year 2015
- Mok, K. H. (2010). Innovation and education: A comparative study of five Asian societies. Hong Kong Institute of Education, China.
- Murphy, G. (2010). "Entrepreneur: What's In a Definition?"
- Nebil K., Gezahegn A., Hayat Y. (2010). Enabling the Private Sector to Contribute to the Reduction of Urban Youth Unemployment in Ethiopia: Produced and distributed by the Addis Ababa Chamber of Commerce and Sectoral Associations with financial support from the Swedish Agency for International Development Cooperation, Sida
- Negash, E. & Amentie, CH. (2013). An investigation of higher education student's entrepreneurial intention in Ethiopian Universities: Technology and business fields in focus. Department of Management, Jimma University Jimma, Ethiopia,
- Obino, A., Mary, N., and Damary, S. (2012). The Concept of Entrepreneurship: in pursuit of a Universally Acceptable Definition; *International Journal of Arts and Commerce*, Vol. 1 No. 6
- Okpara, I. O. [2000]; Entrepreneurship; Precious printers and publishers, Enugu.
- Oosterbeek, H., Van, M., and Ijsselstein, A. (2008). The impact of entrepreneurship education on entrepreneurship competencies and intentions: An evaluation of the Junior Achievement Student Mini-Company Program. ISSN 1864-7057
- Penrose (1963). Evolution of Entrepreneurship".
- Potter, J. (2008). Entrepreneurship and higher education: local economic and employment development.
- Reiss, B. (2010). "Entrepreneur: What's In a Definition?"
- Robinson, P. & Malach, S. (2004) "Multi-disciplinary Entrepreneurship Clinic: Experiential Education in Theory and Practice" *Journal of Small Business & Entrepreneurship*, Vol. 17, No. 4, Fall, pp. 317-332
- Santos, A. Guedes, and M. Fonseca (2012). The role of teaching institutions to prepare and promote social entrepreneurs. *ACRN Journal of entrepreneurship perspectives* 1(1) p. 161-167, ISSN 2224-9729.
- Zegeye, B. (2013). Factors Explaining Students' Inclination towards Entrepreneurship: Empirical Study of Ethiopian University Students; *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, An Online International Monthly Journal (ISSN: 2306 367X); Volume:1 No.4 April 2013
- Zhou, M. & Xu, H. (2012). A Review of Entrepreneurship Education for College Students in China. *Administrative sciences*, ISSN 2076-3387 available from [www.mdpi.com/journal/admsci](http://www.mdpi.com/journal/admsci)