

Challenges and Prospects of Entrepreneurship Development and Job Creation for Youth Unemployed: Evidence from Addis Ababa and Dire Dawa City Administrations, Ethiopia

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Abstract

This research paper is on youth employment and entrepreneurship. It has investigated total of 3591 youths in two different geographical areas of Ethiopia, i.e., central and eastern. Entirely it has taken three specific villages: Melka Jebdu & Gedenser (Easter Ethiopia) and Wereda 10(Addis Ketema, central Ethiopia). The core objective of the study was to assess the issues related to youth unemployment and entrepreneurship in major cities of Addis Ababa and Dire Dawa. Some of the specific objectives set were to determine unemployment rate for male and female youth in the selected Kebele/Sub city, Determine the magnitude /proportion of the unemployed across population subgroups (by age group, by sex, by urbanity) and similarly Identify major bottlenecks for the female youth and male youth to start up own business in the selected two areas. As a spring board for conclusion, the following hypotheses were set: the level of female youth unemployment exceeds male youth unemployment, financial constraint is the most critical bottleneck to start up a new business in the selected sites, The youth is suffering from unfair competition and corruptive employment actions, Youth in the area lack training related to starting their own venture. As a tool of descriptive data analysis in this research paper frequency tables has been used. In addition, binary logistic regression predicting and analysis tool has been used to check the tendency of youth self-employment in the project sites. The census finding shows that youth unemployment rate is at 11.39% aggregately for the two project sites. Specifically, the project site in Addis Ababa prevails youth unemployment rate of 10.06%. Contrastly, The two sites in Dire Dawa sites: Melka Jebdu and Gedenser has youth unemployment rate of 12.87% and 20.34% consecutively. In addition, it has found that the major cause of youth not to engage in self-employed job is capital. The research has also tried to determine how unemployment is reflected gender wise. Accordingly, the aggregate data shows hypothesizing that unemployment are highly prevailed on female than male in the localities is totally false. Generally, this paper has investigated issues like: Factors affecting youth to be self-employed in overall project sites, the involvement of youth in multiple jobs (employments), it also indicates the degree of influence of various factors on youth to be self-employed. Finally, it has provided vital policy recommendations to handle youth's employment/unemployment issue in the project areas

Keywords: Equib, Edir, CBMS, Self-employed

1. INTRODUCTION

Almost 90 percent of the world's youth are residents in countries where they can hardly access adequate education, capital, paid employments and health services. As the sizes of younger populations in Africa steadily swell to account the single largest category of age group, the likelihood of majority of these youth being absorbed within the formal economy is nearly nonexistent. (DSW, 2011)

Encouraging the integration of young people at work and improving their situation in the labor market are two of the main priorities of the Ethiopian government. (Talent Youth Association (TaYa), 2014)

This hard fact has strong reflection on the demographic and socioeconomic reality of Ethiopia. More than half of the population in Ethiopia is made up of young people under the age of 25 (DSW, 2011). It is also true that women constitute slightly more than half the population of Ethiopia. Greater numbers of youth and women are vulnerable to conditions which deprive them from securing material wellbeing. They are mostly engaged in the informal sector to earn for their living. (Central Statistical Agency, 2008)

Governmental organizations, NGOs and civic associations in Ethiopia and other countries adopt and use various age ranges for the concept of "Youth" from the standpoint of the purpose which they stand for and the activities they undertake. For instance, the United Nations (UN) and WHO defines the youth as persons between 15-24 years and 10-24 respectively. In Ethiopian context, the Ethiopian Social Security and Development Policy define someone between the age ranges of 15-24 years as youth. (Ministry of Youth, Sports & Culture of Ethiopia, 2005)

In the context of Ethiopia, all persons aged ten years and over who were productively engaged or available to be engaged during the reference period were included as economically active persons. In other words, the economically active population comprises all persons aged ten years and over who were employed or unemployed

in the reference period. The complements, i.e., those who were neither engaged nor furnish their labor constitute the economically inactive population. (Central Statistical Agency, 2005)

The employed population in the current status approach consists of those who were engaged in productive activity for four hours or more during the seven days prior to the date of the interview. Persons who had regular jobs or business or holdings to return to but were absent from work (i.e., not at work or worked less than four hours) for various reasons were also considered as employed persons. (*ibid*)

The Central Statistical Agency definition of unemployment includes an individual who satisfies the ILO standard definition and it is also contextualized for Ethiopia by incorporating partially relaxed and completely relaxed options of measurements. (*ibid*)

The standard definition of unemployment of ILO is based on the following three criteria that must be satisfied simultaneously; “without work”, “currently available for work” and “seeking work”. In addition to this, under partial relaxation, the definition of unemployment includes discouraged job seekers in addition to persons satisfying the standard definition. Discouraged job seekers are those who want a job but did not take any active step to search for work because they believe that they cannot find one. Under the completely relaxed definition, unemployment includes persons without work and those who are available for work, including those who were or were not seeking work. That is, the seeking work criterion is completely relaxed and unemployment is based on the “without work” and “availability” criterion only. (*ibid*)

Today, of all the effects of the economic crisis, unemployment for young people is one of the most worrying issues. More than half of the young people aged below 25 who want to work cannot find a job opportunity, and almost 35% of unemployed young people have been in this situation for over one year. Youth employment is a key issue in Ethiopia, as almost two-third of the population is younger than 25 years. Because of rapid population growth, the labor force is expected to double in the next 25 years. (*ibid*)

Currently, there are 31 public universities under the administration of ministry of education of Ethiopia. This high number of universities has produced many graduates ready for work. Yet currently the most accessible job opportunities involve farming. Eighty percent of Ethiopia’s overall labor force is engaged in subsistence farming. Therefore, more job opportunities are critically needed for university graduates. (TaYa, 2013)

Ethiopia has one of the highest urban unemployment rates worldwide at 50% of the youth labor force. According to a report by the Ministry of Labor and Social Affairs, 87% of all registered job seekers are between the ages of 15-29. Sixty eight percent (68%) of employed youth (rural and urban) are unpaid family workers. Additional estimates of urban youth unemployment include the following: 6% -- 15-19 year old, 18% -- 20-24 year old, 11% -- 15-24 year old. (TaYa, 2013)

The lack of employment opportunities for Ethiopian young people is among the critical development challenges facing by the country and a key barrier to national efforts towards the achievement of the Millennium Development Goals. (TaYa, 2013)

Thus, to accelerate the growth, security and sustainability of the Ethiopian economy development, each sector needs to be supported by young entrepreneurs and employees. Additionally, the need to create more jobs which is consistent and compatible to new graduates is very essential. Youth unemployment breeds disappointment, hopelessness, and despair. These conditions are more likely to result in youth engaging in risky and destructive behavior. The consequences of youth’s risky behavior affect their own health, their families, communities and the nation at large. In other words, they might be Unproductive, they feel a sense of hopelessness, and be at great risk for drug and alcohol addiction, delinquency and getting involved in crime. This may ultimately also lead to social unrest and civil disobedience. (TaYa, 2013)

Generally, supporting youth employment can help break the cycle of poverty. It is estimated that creating productive work for young people in sub Saharan Africa could result in a potential GDP increase of 12-19%. (TaYa ,2013)

Local governments are responsible to create job opportunities for those youth not only in government offices but also in various NGOs and private organizations. Thus, it is our duty to utilize the opportunity unless it will be a time bomb blast at one time in future which can completely distract the social, political and economic stability of the country. Even though it is primarily the government’s responsibility to address the issue of unemployment, the society should play their parts in the efforts being taken by the government as they will be the main victims of unemployment which ultimately results in poverty. Meanwhile, the country higher officials need to intensively work on entrepreneurship and job creation for the targeted portion of the society (youth). Even though it is not sufficient enough, the Ethiopian government is working hard to open suitable ground for youth entrepreneurship through crafting and implementing a sound policy to bind youth under Small and Micro Enterprises (SMEs).

Finally, it is better to inquire why prevalence of unemployment is high in the country and in the selected CBMS project areas. Is that because the number of youth and job creation rate is mismatched or any other factors are influencing? And how government is working on entrepreneurship, how youth are benefiting from the policy direction needs to be investigated.

The data has been collected from total of 3591 both from Dire Dawa and Addis Ababa. Numerically the number of youth in Wereda 10, Melka Jebdu and Gedenser is 2048,1484 and 59 consecutively.

This part has been sub classified as Descriptive research and Model output analysis. In descriptive tables has been entirely used. However in the second part logistic regression analysis has been utilized.

2. Results and Discussions

2.1 Descriptive Research Outputs

In this section tabular analysis and relative frequency measures are used to investigate youth condition related to various factors mentioned above:

Table 1: Youth unemployment status and Sex in overall project sites

Site	Unemployed		Sex			
			Male		Female	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	206	10.06	102	49.51	104	50.49
Gedenser	12	20.34	7	58.33	5	41.67
Kebele 01	191	12.87	122	63.87	69	36.13
Total	409	11.39	231	56.48	178	43.52

Source: CBMS-Ethiopia Survey, 2015

The above table depicts the distribution of unemployment youth in the overall project sites. The enumeration found that in the overall project sites there are 3591 youth. From the total youth 11.39% is unemployed while 88.61% of them are not unemployed. Not unemployed includes employed youth and youth who are not ready to work or not actively searching job.

The prevalence of unemployment in Wereda 10 of Addis Ketema as it has been shown above is only 10.06% .

Large proportion of youth in Melka Jebdu area of Dire Dawa is observable with proportion of 12.84 %.Relatively the severity of unemployment is high in this administrative area.

In Gedenser also there is high unemployment rate at 20.34 %.Only 79.66% of youth could not be considered as unemployed.

The table above shows how unemployment is distributed sex wise. Previous tables show that the total number of unemployed from 3591 youth in the overall project site is 409.Now the above depicts out of the unemployed 409 youth 56.48% are female and 43.52% are female.

Hypothesis: The level of female youth unemployment exceeds male youth unemployment

The total census survey and table above indicates that in the overall project sites male youth are highly exposed to unemployment than female youth. Hence the proposed initial hypothesis that unemployment is high on female than male is completely false.

Table 2: Factors to be self employed

Site	Wereda 10		Gedenser		Kebele 01		Total	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Business license	30	1.46	2	3.39	70	4.72	102	2.84
Capital	462	22.56	21	35.59	799	53.84	1282	35.70
Market access	49	2.39	25	42.37	89	6.00	163	4.54
Input access	26	1.27	7	11.86	55	3.71	88	2.45
Other	1	0.05	0	0.00	3	0.20	4	0.11
Not applicable	1480	72.27	4	6.78	468	31.54	1952	54.36
Total	2048	100.00	59	100.00	1484	100.00	3591	100.00

Source: CBMS-Ethiopia Survey, 2015

According to the figures set on the table above, capital is the major factor which contributes adversely to youth in the overall project area not to involve in self-employment. As an adverse effect, capital takes 35.70% of the time as a cause to irritate youth not to begin their own business. In numerical figures, almost 1282 of the 3591 youths complain for absence of capital with regard to involving in self-employment.

Similarly, the figures in the same table the major factor considered as hindering factor for the youth not to be self-employed in wereda 10 is stated as capital. Almost 22.56% percent of the youths complained capital as prominent factor.

Still in Melka Jebdu (Kebele01) capital persists as the core problem for youth not to involve on self-employed businesses. It takes 53.84% of the time as hindering and challenging factor.

Note: No in the table above indicates the proportion of youth who do not tried to be self-employed at all or who tried but not mentioned factors affecting their effort to be self-employed.

Exceptionally, in Gedenser area capital is not considered as the factors which challenges those youth who tried to be self-employed. There is no capital problem in the area. There is enough land and irrigable land. But the major factor is market access due to absence of transportation infrastructure. Market access is high at 42.37%. However, it does not mean that the issue of capital problem is zero. Still it affects 35.59% of the time.

Hypothesis: Financial constraint is the most critical bottleneck to start up a new business in the selected sites.

The census survey on the youth has confirmed that capital takes the lions share as the major critical problem which threatens youth not be successful in establishing business firms is. Hence the table above has granted logical reason to conclude that capital is the major factor hinders youth success in self-business. The alternative source of capital which is currently available is to involve in equb, i.e, traditional and voluntary saving.

Table 3: Youth participation on Technical & Vocational School and sex in overall project sites

Site	Participating in TVS		Sex			
			Male		Female	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	116	5.66	66	56.90	50	43.10
Gedenser	2	3.39	2	100.00	0	0.00
Kebele 01	29	1.95	23	79.31	6	20.69
Total	147	4.09	91	61.90	56	38.10

Source: CBMS-Ethiopia Survey, 2015

In Ethiopia Technical and Vocational School (TVS) training is an option for youth to make them ready for future career. Totally in the project sites 95.91% of the total youth did not participate in technical and vocational school. But Specific observations depict that in wereda10 94.34% of the youth has participated in technical and vocational school, numerically that is 1932 youth. In Melka Jebdu the experience is like Wereda 10 were majority doesn't go through technical and vocational training. In contrast only 1.95% has attended this program.

In the other project sub site, Gedenser the participation of youth in technical and vocational school is only 3.39% were majority (96.61%) are out of the program.

Table 4: Youth involvement on entrepreneurship training

Site	Yes		No	
	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	70	3.42	1978	96.58
Gedenser	14	23.73	45	76.27
Kebele 01	315	21.23	1169	78.77
Total	399	11.11	3192	88.89

Source: CBMS-Ethiopia Survey, 2015

One of the pull factors which motivates youth to be self-employed is participation in entrepreneurial trainings. Considering this fact, from the total youth of 3591 in the project sites only 11.11% have participated in similar training. However 88.89% had no related training at all.

Hypothesis: Youth in the area lack training related to starting own venture.

According to the above table, majority of the youth (88.89%) in the whole project sites does not have entrepreneurship training. Additionally, 95.91% of the youth does not pass through technical and vocational schools. Hence conditions are sufficient to conclude that Youth in the area lack training related to starting their own venture.

Table 5: Youth employment status and sex in overall project sites

Site	Employed		Sex			
			Male		Female	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	1117	54.54	464	41.54	653	58.46
Gedenser	10	16.95	1	10.00	9	90.00
Kebele 01	102	6.87	47	46.08	55	53.92
Total	1229	34.22	512	41.66	717	58.34

Source: CBMS-Ethiopia Survey, 2015

As far as youth employment is concerned almost 34.22% of youth in the overall project site is employed. Employed mean they are either self-employed or employed somewhere for wage or salary.

When the issue of employment is decomposed at kebele or wereda level: In wereda 10 still significant number of youth population is not employed, i.e, at 45.46% employed figure shows only 54.54%.

In Kebele01, Dire Dawa the number of youth is 1484. Of which only 6.87% are employed (Self-employed or employed for wage/salary or family gain etc). The severity of the problem of being not employed is high in this sub project site than ever. Whereas in Gedenser the number of youth is 59 16.95 are employed.

Table 6: Employed youth involvement in extra job(Multiple Employment)

Site	Involved		Not involved	
	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	62	5.55	1055	94.45
Gedenser	0	0.00	10	100.00
Kebele 01	1	0.98	101	99.02
Total	63	5.13	1166	94.87

Source: CBMS-Ethiopia Survey, 2015

Youth might involve in multiple jobs in a regular or part time basis. The overall project site observation shows, out of total employed youth of 1229, only 5.13% are with multiple job or duty. However 94.87% is with no extra job.

In Wereda 10 1117 youth are employed and out of that 7.77% are working in extra duty. Still 94.45% are limited in a single job.

In Melka Jebdu, out of the entire youth only 102 are employed. Even out of those 102 employed youth only 0.98% has engaged in additional duty.

In the other subproject site Gedenser, Dire Dawa there is no observation with employment and extra duty engagement.

Hypothesis: Many youth especially those with lower educational attainment venture in to entrepreneurial activity out of necessity.

The above table confirms that majority of youth in the area joins self-business out of necessity because 94.87% of employed youth does not have extra job. It has involved in the self-business for necessity purpose.

Table 7: Youth self-employment status and sex in overall project sites

Site	Self-employed		Sex			
			Male		Female	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	59	2.88	35	59.32	24	40.68
Gedenser	0	0	0	0	0	0
Kebele 01	3	0.20	1	33.33	2	66.67
Total	62	1.73	36	58.06	26	41.94

Source: CBMS-Ethiopia Survey, 2015

Based on the above table in the overall project site only 1.73% of the youth owns and involved in self-business. However 98.27% are either employed for wage/salary or jobless.

Youths in wereda10 are self-employed only at the rate of 2.88%. While 97.12% of them are either employed for wage or jobless.

In Melka Jebdu (Kebele 01) the problem of being not self-employed is extremely high with the proportion or percentage of 99.80. It is daring to say almost no one is self-employed.

The above table shows there is no self-employment in Gedenser rural kebele of Dire Dawa. Previous tables show that the youth of Gedenser are totally not self-employed or employed for wage/salary.

Table 8: Factors of self-employment in all sites (three sites)

Site	Wereda 10		Gedenser		Kebele 01		Total	
	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion	Magnitude	Proportion
No employment opp.	32	54.24	0	0.00	1	33.33	33	53.23
Independence	8	13.56	0	0.00	1	33.33	9	14.52
Need to increase income	14	23.73	0	0.00	0	0.00	14	22.58
Non family influence	2	3.39	0	0.00	0	0.00	2	3.23
Family influence	3	5.08	0	0.00	1	33.33	4	6.45
Total	59	100.00						100.00

Source: CBMS-Ethiopia Survey, 2015

Youth might raise various reasons for being self-employed. Hence, the table above shows why youth prefer and prefer to be self-employed. The major factor as per the analysis on the above table depicts is no employment opportunity. This also complies with youth engagement on self-business out of necessity. Youth will prefer to start their own business if they are jobless for long period of time. Next to this factor so as to get higher amount of income youth might join self-business.

Table 9: Unemployment and Unfair competition

Site	Bribed		Not bribed	
	Magnitude	Proportion	Magnitude	Proportion
Wereda 10	5	2.43	201	97.75
Gedenser	0	0.00	12	100.00
Kebele 01	19	9.95	172	90.05
Total	24	5.87	385	94.13

Source: CBMS-Ethiopia Survey, 2015

Hypothesis: The youth is suffering from unfair competition and corruptive employment actions

The table above indicates that 5.87% of the youth unemployed confirmed that employment environment is highly unfair. Hence it is true that the youth is suffering from unfair competition and corruptive employment actions

2.2 Model Results Discussion

Covariates of Self-employment (engagement in entrepreneurship)

In this section attempt is made to identify the correlates of self-employment in order to make the determinants of entrepreneurship engagement analysis complete. The simplest way to analyze the correlates of self-employment is using a logistic regression analysis of whether the youth is engaged in entrepreneurship against household demographic factors, specific individual characteristics, asset holdings of the household, village level factors, social capital indicators and policy related variables. Based on this rationale the model is specified as follows.

Model Specification

The dependent variable is the engagement of the youth in entrepreneurial activity. To identify the correlates of this engagement, binary variable that indicates involvement in entrepreneurial activity or not is regressed up against different covariates of this engagement in logistic regression. Denoting all explanatory variables as X_i , the following equation specifies the model used in this section.

$$Engagein\ Entrepreneurship = \beta^i X_i + \varepsilon_i \text{-----(6)}$$

Left hand side term of Equation (6) is a dichotomy variable which has a value 1 if the youth is engaged in his/her own business and 0 otherwise. And the right hand side explanatory variables are: a) household characteristics and demographic variables like sex, age and years of education of the youth b) Family background variables like total asset of his/her family, television and radio access, family size c) social capital variable like engagement in village level saving and loan association, locally called 'Equib' and membership for village level cooperatives d) access variables like telecom service accessibility, television, radio and newspapers' accessibility of youths are considered e) training exposure variables like whether the youth took entrepreneurship short term training and short or long term training from technical and vocational school are the variables involved in this regression analysis.

Partial correlation coefficient, β , tells us the association between entrepreneurship engagement indicator and the explanatory variables rather than their causal relationship. The detail list of explanatory variable and their description are presented as follows;

X_1 = Age of the youth

x_2 = Sex of the youth (Dummy); 1 if male 0 if female

x_3 = Years of educational of the youth

x_4 = Television ownership of the youth's family (Dummy); 1 if they possess and 0 if not

x_5 = Radio ownership of the youth's family (Dummy); 1 if male 0 other wise

x_6 = Telecommunication access of the youth (Dummy); 1 if they have access and 0 if not

x_7 = Newspaper access of the youth (Dummy); 1 if they have access and 0 if not

x_8 = 'Equib' membership of the youth (Dummy); 1 if the youth is member and 0 if not

x_9 = Cooperative membership of the youth (Dummy); 1 if the youth is member and 0 if not

x_{10} = Total asset value of the youth's family in Ethiopian Birr

x_{11} = Family size of the youth's family

x_{12} = Technical or vocational training received (Dummy); 1 if the youth received training and 0 otherwise

x_{13} = Entrepreneurship training received (Dummy); 1 if the youth received training and 0 otherwise

Hypotheses of the Logistic Regression Model

The explanatory variables which are included in the model are based on the expectation or hypotheses which are summarized hereunder.

Age of youth (x_1)

The larger the age of youth is the better experience for different economic activities. Based on this expectation the coefficient of age of youth expected to have a positive sign.

Sex of household head (x_2)

Because of the long trend of educational practices in the country female are very few in moving up on the ladder of formal education that make majority them keen to involve in their own business. Since female youth are considered as a base in the specification, negative sign is expected from the coefficient of this dummy variable.

Years of education for household head (x_3)

Based on the assumption that indicates the more educated the youth is the more ready to receive employment from GOs and NGOs operate in the country rather than involving in their own business. Consequently a negative sign is expected from this variable's coefficient.

Access variables: Television ownership of the youth's family (x_4), Radio ownership of the youth's family (x_5), Telecommunication access of the youth (x_6) and Newspaper access of the youth (x_7)

Youth who have access to these information sources are empowered by the information and share the experiences of successful entrepreneurs. This is expected to inspire the youth to have their own business or to be engaged in entrepreneurial activities. These variables are expected to contribute positively for entrepreneurial engagement. Hence, positive coefficients are expected.

'Equib' membership of the youth (x_8) and Cooperative membership of the youth (x_9)

These social capital indicator and microcredit service variables expected to contribute positively for the youth to be self-employed or to create their own business. Since they are a substitute for the formal financial institutes, which marginalize the poor and youth who can't afford a strong collateral requirement, a positive sign is expected from their coefficient estimates.

Total asset value of the youth's family in Ethiopian Birr (x_{10})

With the assumption that households who possess larger land and other assets can produce better for rural households and can have a better capital for businesses in urban areas and consequently enhance the family income and consumption. These family assets will have a multiplier effect on their young children to get their startup capital. Therefore, positive coefficient is expected from this variable.

Family size of the youth's family (x_{11})

No theoretical and empirical bases were found to expect the sign of this variable's coefficient. So no sign expectation is set regarding to this variable.

Technical or vocational training received (x_{12}) and Entrepreneurship training received(x_{13})

The major objective of such trainings is to create individuals who can use the available theory and practice in the science of entrepreneurship together with different technical and vocational training skills to engage in their self-employed business. These trainings expected to enhance a person’s probability to engage in entrepreneurship activities. Therefore, a positive sign is expected from both variables’ coefficients.

The regression model estimates are presented below in table 12 and it indicates that the overall model, χ^2 calculated, is significant at less than 1% level of significance. This indicates that the variables which are included in the logistic regression model have coefficients which are jointly different from zero value. In addition, the regression estimate has made with an option of robust standard error rather than the normal one, heteroskedasticity is not a problem anymore. The related multicollinearity test also performed using Variance Inflation Factor (VIF).

In the empirical result with 4.03 average values of VIF, there is no severe multicollinearity among the explanatory variables. All of them have the value less than 3, with the exception age of youth. The estimate of the VIF is also attached in annex table.

Most of the variables’ coefficients have the expected sign. With the exception of newspaper, cooperative membership of the youth and entrepreneurship trainings other variables which are included in the model viz., age of youth, sex of youth educational status, television, radio and telecommunication access, ‘*equib*’ membership, total asset comes up with the expected sign despite some of them are insignificant as it is observed from the table 12.

Table 10: Logistic Regression result for covariates of self-employment

Variable description	Variable name	Coefficient	Robust Standard Error
Age of the youth	age_yr	0.26	0.065***
Sex of the youth	Sex	-0.53	0.28 *
Educational status of the youth	Educal	-0.18	0.056***
Television ownership of the youth’s family	Tv	0.015	0.36
Radio ownership of the youth’s family	Radio	0.16	0.27
Telecommunication access of the youth	Telecomind	3.33	1.07***
Newspaper access for the youth	nwsppraccess	-0.51	0.29*
‘ <i>Equib</i> ’ membership of the youth	Equibind	1.18	0.312***
Cooperative membership of the youth	Coopind	-1.38	0.73*
Total asset value of the youth’s family	total_asset	0.0001	0.0001
Family size of the youth’s family	family_size	-0.06	0.06
Technical or vocational training received	Tvs	-0.404	0.53
Entrepreneurship training received	entrep_te	-0.708	0.060
	constant	-10.9	1.86***
Number of Observation		3591	
Wald $\chi^2(13)$			85.69***
Prob > χ^2			0.0000
Pseudo R ²			0.2375

*significant at 10% **significant at 5% *** significant at 1%

Source: CBMS-Ethiopia Survey, 2015

From the above table, as it was hypothesized the variable age of the youth has positive and highly significant (with p-value less than 1 % level) contribution for the youth to engage in self-employment. Similarly, the variable indicated as sex of the youth shows the expected sign and it is also significant at less than 10%. This indicates that there is significant partial correlation between being female and engagement in self-employment. The other variable in this category, years of education, come up with the expected negative sign and highly significant result, with p-value less than 1%, as it was hypothesized. The coefficient sign of education (negative) implied that the higher the education achievement of the youth less will be the tendency him/her to involve on self-employment activities. Most of youth who achieves higher level of education are not willing to take risk of involving in entrepreneurial activities. This also better supports youths’ are involved if and only if they don’t have higher level of education and chance of employment.

Some information access variables show consistent and some show contrary result from previously hypothesized sign. Access to telecommunication services has highly significant positive contribution, even less than 1% p-value, for a youth to engage in entrepreneurship. However, television and radio access have no significant contribution for the youth to engage in entrepreneurial activity. On the contrary, those youth who have access for newspaper found that there is a lower probability of youth to engage in his/her own businesses. Empirical review shows that most of Ethiopian newspapers are overwhelmingly crowded with vacancy

announcements. Having an exposure to that newspaper will shape youths' intention to be employed than self-employed.

Social capital variable, 'equib' membership, coefficient is significant and positive as it was hypothesized. It is due to a dual purpose that 'equib' plays in Ethiopia's various villages in both at rural and urban. In the one hand it substitutes formal financial institutes via provision of microcredit without collateral requirement to finance members businesses or to start up a new one. On the other hand, it creates a good platform to share experiences of different business persons. Both reinforce the logic behind the positive and significant variable's coefficient. On the contrary, membership in local cooperative has no impact on probability of being self-employed. It may emanate from a very limited human and financial capacities of majority of cooperatives operate in Ethiopia.

All other variables viz., asset ownership of families of youths, family size and short term entrepreneurship and technical and vocational training from technical and vocational colleges found to be insignificant.

Variable that indicates urban rural dwellership is automatically dropped by stata due to its functional multicollinear relationship with other explanatory variables. This has been indicated by stata output attached in the annex.

Table 11: Marginal Effect for covariates of self-employment

Variable description	Dy/dx	SE
Age of the youth	0.0008341	0.00038
Sex of the youth	-0.0016758	0.00087
Educational status of the youth	-0.0005793	0.00021
Television ownership of the youth's family*	0.000483	0.00113
Radio ownership of the youth's family*	0.0004956	0.00083
Telecommunication access of the youth*	0.0070345	0.00226
Newspaper access for the youth*	-0.0014629	0.00089
'Equib' membership of the youth*	0.0062029	0.00313
Cooperative membership of the youth	-0.002679	0.00126
Total asset value of the youth's family*	2.01e-09	0.00000
Family size of the youth's family*	-0.0001888	0.00019
Technical or vocational training received*	-0.0010679	0.00122
Entrepreneurship training received*	-0.0017352	0.00134

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

The table above implies marginal effect of covariates on youths' possibility to be self-employed. A percentage increase in educational status reduces the youth possibility to be self employed by 0.05%. Similarly a percentage increase in youths' access to telecom service increases youths' possibility to be self employed by 0.7%. The likelihood of the youth to involve in self-employment positively changes by 0.62% when they youth decided to participate in equb.

3. METHODS

3.1 Participants and Procedures

Youth with the age range of 15-24 years old has been taken as a target study. The instruments which have been developed were tested for field validity on 100 targets. Then the field pilot study has clearly indicated the areas in which the researcher has to review. Some questions have been added and removed. Options or responses lists have been updated. After doing all this the questionnaires, Household Profile questionnaire (HPQ), Community Profile Questionnaire and Youth Employment and Entrepreneurship Questionnaire (YEEQ) has been uploaded to digital format were it becomes available for tablet based data collection purposes.

The data has been collected using latest Gadget of Samsung tablet 4 equipped of GPRS reading. Every data collected has GPRS readings of latitude, longitude and altitudes with accuracy of less than 15.

3.2 Statistical Analysis Approach

The tablet based data collection approach has eliminated the tiresome data encoding tasks. The data which has been collected has been downloaded from data server and edited. Meanwhile the researcher has used STATA13 to generate tables and results.

The binary logit predicting model has been used to identify the pattern of relationship between the possibility of a youth to be an entrepreneur in the future with the explanatory variables. To be more detail marginal effects (mfx) of the explanatory variable to the output variables has been made.

The post optimality tests of Endogeneity and multi collinear has been made and the mean VIF result is less than 10.

4. Conclusions

This research has identified in the three sites there is a strong relationship between educational status and the possibility to be self-employed. Being reach top hierarchical position in educational positions has negative correlation with the prospect to be employed. Empirical evidences also shows that a person who reach graduate level has fear of risk taking and prefers to be salaried than involving in self-employment.

Second, this study has identified Social capital variable, 'equib' membership has direct and strong relationship with the chance of the youth to involve in entrepreneurial activity. The more he or she involved in equib or Edir which are the communal or village based savings, the higher the possibility to be an entrepreneur.

Third, age level of the youth has strong relationship with the possibility to be an entrepreneur. The logit result shows the older the age of the youth the higher to involve in entrepreneurial activities.

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Authors' Contribution

Authors contributed equally to this manuscript. All authors read and approved the final manuscript.

Competing interests

The authors declare that they have no competing interests.

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