

Determinants of Urban Youth Unemployment: Evidence from Guder Town, Western Shoa Zone, Ethiopia

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ABSTRACT:

Unemployment is a global issue that challenging every nation. It represents the underutilization of human capital and it is very important issue that negatively affects the development of the country. The study aimed to identifying the determinants factors responsible for urban youth unemployment: The study adopted a cross sectional data of Urban Employment-Unemployment. The town was purposively selected from the town of west shoa zones. The primary data was collected from 91 sample respondents through interview questionnaire from Guder town proportionally. A descriptive and econometric analysis was employed to meet the main objective of the study. The descriptive analyses result revealed that about 61.5 % of the youth are unemployed while 38.6 % are employed. Regression results from a binary logit model estimation show that sex, educational level, marital status, skill match and access to credit use of youth are found to be the significant determinants to urban youth unemployment while family prosperity and market information were statistically insignificant to urban youth unemployment in the town. The econometric results suggested the need for the government go aboard on creating jobs through identify employment opportunities and industrialization and mechanization of agriculture.

Keywords: Unemployment, Determinants, Binary logit model, Youth

DOI: 10.7176/RHSS/9-17-07

Publication date: September 30th 2019

1. INTRODUCTION

Unemployment is one of the major challenges facing today's world and coupled with population growth and increased poverty Abebe F., (2004). The labour force is growing with an increasing proportion of youth and employment growth is inadequate to absorb this high proportion of labor force specially the youth part in different sectors of the economy in Ethiopia (Alemnew, 2014: cited in Aynalem Sh. and Mulugeta D. (2018). The country is the highest urban unemployment rates worldwide, at about 50% of the youth labour force Berhanu *et al.*, (2005). The problem of unemployment is more severe in urban than in rural area. According to Ethiopian labor force survey report, the unemployment rate of urban youth at country level was 22.9 while it was only 3.1% in rural areas Labor Force Survey, (2013). It is special concern for Ethiopians and has a wider implication for the youth in addition to leading their life as expected to help parents and extended families Shumet, (2011). According to a survey in 55 urban areas, unemployment was estimated at 41.3% and the incidence of youth unemployment was 45.5% and 35.7% for females and males respectively (Alemnew, 2014: cited in Aynalem Sh. and Mulugeta D. (2018).

As different studies indicated, the potential causes of unemployment in urban Ethiopia include increasing number of youth labor force, the rising internal migration, literacy rate, poor to modest macroeconomic performance, low level of job creation and low level of aggregate demand in the economy (Getinet, 2003; WB, 2007). Youth unemployment is the outcome of different socio-economic factors at macro and micro level (Toit, 2003: cited in Aynalem Sh. and Mulugeta D. 2018). This study emphasizes on assessing individuals' socioeconomic attributes that influence youth employment.

Identifying the determinant factors influencing urban unemployment of youth residents should be the first step to come up with the alternative strategies to solve the problem. In this regard, even though few studies were conducted on the determinants urban unemployment (Alemnew, 2014: cited in Aynalem Sh. and Mulugeta D. (2018), the results of these studies are varied depending on the specific socio-economic situation of the study area. Therefore, this study is aimed to characterizing and analyzes determinants of urban youth unemployment at Guder town dwelling using the binary logistic regression model.

2. RESEARCH METHODS

Study Area: The study was conducted at Guder town which is located in Oromia Regional State West Shoa Zone. It bounded by Chaliya Woreda in West, Ambo Woreda in the East, Mida kegn Woreda in North, and Tikur Inchini Woreda in South. This town has latitude and longitude 89667(8°58 N) and 377667 (37°46 E) respectively, with an elevation of 2101 meter above sea level. The town is located at 136 kilometer from capital of Addis Ababa. The town has an estimated total population of 12569 with total youth population of 1038 from two kebeles namely 01 and 02 kebele Central Statically Agency (2013).

Sampling Techniques and Research Design

A cross sectional survey design was used to collect data from selected respondents through interview

questionnaire. Purposive sampling techniques were employed to select Guder town considering numbers of urban dwellers living there. This study is conducted at individual level, the required number of sample drawn is the total number of active labor force of youth was purposively selected from the sampling frame or the total population found in the towns. Both primary data and secondary data were collected from youth's representative respondents and different sources. The data was collected from selected respondents in the study area through interview questionnaire and key informants discussion.

Sample size Determination

To determine the representative sample size from the town, the study used a sample size determination formula given by Yamane (1967)

$$n = \frac{N}{1 + \frac{N(e)^2}} \quad n = \frac{1038}{1 + 1038(0.1)^2} = 91$$

Where: **n** is the representative sample size, **N** is the total youth population of the towns which is found to be the total 1038 Central Statistically Agency (2013) and **e** = is level of precision defined to determine the required sample size at 95% confidence level. A total of 41 and 50 youths are from 01 and 02 kebeles town respectively.

Method of data Analysis

Descriptive and econometric analyses were employed to meet the objective of the study. In the case of descriptive analysis tables, average and percent were employed, while the econometric analysis binary logit model was employed to identify determinants of urban youth unemployment.

Model Specification

Unemployment status of urban youths: dependent variable of the model that is dichotomies or dummy variable that take value 0 = if urban youth is employed and 1= if urban youth is unemployed. The appropriate econometric technique to deal with such type of data is using binary logit and probit models and the most popular statistical techniques was used to analysis the probability of a dichotomous outcome (such as employed or unemployed) with a set of explanatory variables. Binary logistic regression model was used to identify determinants of urban youth unemployment. It is a special type of logistic regression model which is used to describe the relationship between one or more independent variables and a binary outcome variable that has only two possible values. Logistic regression is used in a wide range of applications leading to categorical dependent data analysis (Agresti, 2002).

Gujarati (2004) the logistic model could be written in terms of the odds ratio and log of odds ratio, which enable one to understand the interpretation of the coefficients. In this study, the odds ratio is the ratio of the probability that the youth will be unemployed (P_i) to the probability that he/she will be employed ($1-P_i$).

$$p_i = f(Z_i) = f(\alpha + \beta_i \chi_i)$$

$$= \frac{1}{1 + 1e^{-(\alpha + \Delta \beta_i \chi_i)}}$$

Since, $Z_i = \alpha + \beta_i \chi_i$ the above formula can be rewrite as shown below for easily understanding.

$$(1 - p_i) = \frac{1}{1 + e^{Z_i}}$$

$$\left(\frac{p_i}{1 - p_i}\right) = \frac{1 + e^{Z_i}}{1 + e^{-Z_i}} = e^{Z_i}$$

Therefore, $\left(\frac{p_i}{1 - p_i}\right) = \frac{1 + e^{Z_i}}{1 + e^{-Z_i}} = e^{(\alpha + \Delta \beta_i + \chi_i)}$

Taking the natural logarithm from above equation

$$y_i = \ln\left(\frac{p_i}{1 - p_i}\right) = \alpha + \sum_{i=1}^K \beta_i \chi_i + \varepsilon_i$$

Where

K = Number of independent variable included into the model

χ_i = Vector of independent variable

ϵ_i = Error term (disturbance term)

α = value of log odd ratio $\frac{(p_i)}{1-p_i}$ When X_i or independent variable is zero

β = Measures the change in L (logit) for a unit change in explanatory variables (X)

y_i = Dependent variable that take value $y=0$ if youth is employed and $y=1$ if youth unemployed

Table1: Summary of independent variables that may influence urban youth unemployment

Variable code	Description	Categorical	Expected sign
EMPS	Employment Status	0 = Employed 1 = Unemployed	
SEX	Sex	0 = Female, 1 = Male	+/-
MART	Marital status	0 = Married, 1 = Unmarried	+
EDUL	Educational level	0 = Illiterate, 1 = Primary school, 2 = Secondary school and 3 = Certificate & above	+
ACCRU	Access to credit use	0 = No access to credit use 1 = Access to credit use	+/-
ACCMI	Access to market information	0 = Sometime 1 = Always	+/-
SKILL	Skill match	0 = Match, 1 = mismatch	+
FPL	Family prosperity level	0 = Rich, 1 = poor	+/-

3. RESULT AND DISCUSSION

Background of the Respondents

Sex of youth: The majority of the respondents are male in their sex. Of the total responses, 65.9 percent are male and 34 percent are female with average year of the sample is 24.5 years. The highest unemployment is seen for male youth 40(43.9 percent) respondents but 16(17.5 percent) respondents' female youth. Using those male respondents as a base, the analysis shows that those who are female respondents have a low level unemployment rate as compared to male youth in the study area.

Youth educational status: The association between education and employment condition is crucial. It is known that education is a very important for innovation, job creation and poverty alleviation. The unemployment rate for illiterate, primary school, secondary school, and certificate & above graduate youth are 4.4%, 6.6%, 14.3% and 36.3% respectively in the study area. In line with this, table 2 shows that youth who have certificate and above education level has low opportunity in obtaining jobs in the study area.

Marital status of youth: relatively larger proportion, 53.8 percent of the youth are never married while about 46 percent of them are married with average household size is 3.2 family members. The highest unemployment rate is seen for unmarried youth 39(42.8%) of respondents but 17(18.7%) of respondents' married followed by live together. Using those unmarried as a base, the analysis shows that those who had married youth have a low level unemployment rate as compared to unmarried in the study area.

Work condition of Employed youths: As regard to those employed, 10(28.5 percent) is self employed followed by private, government sector employees and unpaid family worker, 13(37%), 7(0.2%) and 5(14.3%) respectively. It is good to see the highest proportion is private organization and self employed; otherwise it is difficult for the government to provide job for all unemployed youths.

Match skill: measured with relative to mismatch and matched. From the sample respondents the unemployment youth for those skills are matched was 36(64.3%) while for those mismatch was 20(35.7%) and the respondents youth employed for those whose skills are mismatch 5 and matched was 30 respectively.

Family prosperity level: measured with relative to rich and poor based on the living condition of the society at the study area. The result revealed that the unemployment rate of individuals from poor families was 38(67.8%) while for individuals from rich families was 18(32.1%) respectively.

Access to market information: shows that the proportion of employment status of youth varies significantly with access to market information with regard to this, the higher 39(69.6%) of the unemployed youths always access to market information.

Access to credit use: survey results show that the proportion of employment status of youth varies significantly with access to credit use with regard to this, the higher 38(67.8%) of the unemployed youths was from no access to credit use.

Employment status: Based on the collected data the majorities 56(61.5 percent) of the respondents are

unemployed and the remaining 35(38.6 percent) respondents are employed in the study area under different working conditions.

Table: 2: Description of sampled respondents

Variable	Unemployment Status			
	Employed		Unemployed	
	Number	Percent	Number	Percent
Employment status	35	38.6	56	61.5
Sex of the youth				
Female	15	16.5	16	17.5
Male	20	21.9	40	43.9
Youth Educational level				
Illiterate	9	9.9	4	4.4
Primary education	3	3.3	6	6.6
Secondary education	5	5.5	13	14.3
Certificate graduate & above	18	19.8	33	36.3
Marital status				
Married	25	27.5	17	18.7
Unmarried	10	10.9	39	42.8
Access to credit use				
Access to credit use	24	68.5	18	32
No access to credit use	11	31.4	38	67.8
Access to market information				
Some times	26	74.3	17	30.4
Always	9	25.7	39	69.6
Work condition employed youth				
Government employed	7	0.2	-	-
Private employed	13	37	-	-
Self Employed	10	28.5	-	-
Unpaid Family Worker	5	14.5	-	-
Skill match				
Mismatch	5	14.2	20	35.7
Match	30	85.7	36	64.3
Family prosperity level				
Poor	19	54.3	38	67.8
Rich	16	45.7	18	32.1

4. Determinants of Urban youth Unemployment

Binary logit model was selected to identify the determinants of urban youth unemployment in the study area. Before fitting the model, it was important to check existence of multi collinearity problem among explanatory variables. Variance inflated factors (VIF) was used to test existences of multi collinearity problem among variables. The calculated value of VIF was below 10, there is no serious multicollinearity problem among the explanatory variables. A total of 7 variables included into the model that may affect urban youth unemployment were considered. Among them 5 of the variables (Sex, educational level, marital status, skill match and access to credit use) were found significant while the rest two variables (family prosperity and market information) were statistically insignificant to urban youth unemployment.

Interpretation and Discussion of significant model outcome

Sex of youth: positive and significantly affect employment status of youth in the study area. The results show those males are 71.99% more likely to unemployed as compared to female youth. The study contradicts with the finding of Amanu'el D., (2016).

Educational level of youth: Education level has shown positive relationship with employment status of youth. The result reveals that as education level of respondents' increases from primary school up to certificate graduate the level of youth unemployment increased. It is found that youths who attend certificate graduate and higher education were more likely to be unemployed. The odds ratio of being unemployed increases by 23.7percent if the individual attended certificate graduate and above compared to those who are illiterate another justification for why unemployment rates tend to be higher among the more educated young is that there is unavailability of resources to support full-time job search.

Skill Match: The matches between the non-match skill acquired and demanded for labor market have a positive

effect on youth unemployment. The result reveals that non skill match and unemployment are positively correlated. As non-match skill demand is increases, the odds ratio of being unemployed will increase by 53.8 percent if the individual's skill and the demand by the market becomes non match. This result is contradicts with the study of (Alemnnew, 2014: cited in Aynalem Sh. and Mulugeta D. (2018).

Marital status: There is a positive association between getting unmarried and being unemployed. The Logit model predicts that if youths are unmarried their unemployment status increases by the odds ratio of 33.5 percent compared to married. This is true if unmarried youth not it give more attention for work to improve his livelihood as compared to married youth. This is contradicts with the finding by (Krishnan 1996: cited in Aynalem Sh. and Mulugeta D. (2018).

Access to credit use: Availability of credit use is positive correlated with youth unemployment. The Logit model predicts that if youths are lack of credit use their unemployment status increases by the odds ratio of 82.5 percent compared to credit use. This is contradicts with the finding by Aynalem Sh. and Mulugeta D. (2018)

Table 3: Logistic Regression Model result of Determinants of youth unemployment

<i>Variable</i>	<i>Coefficient</i>	<i>Odds ratio</i>	<i>Std. Err.</i>	<i>P-value</i>
Constant	0.526	0.125	1.486	0.723
Sex of youth				
Female	-0.238	0.262	0.465	0.609
Male	0.345	0.7199	6.608	0.032*
Education level				
Illiterate	0.425	0.0407	0.473	0.369
Primary school	0.525	1.135	0.492	0.287
Secondary school	0.575	0.727	0.673	0.393
Certificate and above	5.537	23.733	1.137	0.000*
Marital status				
Married	0.039	0.006	0.521	0.940
Unmarried	0.395	0.335	0.2103	0.081*
Available skill match				
Match	0.399	0.591	0.519	0.442
Non match	0.764	5.385	4.821	0.060*
Family prosperity level				
Poor	0.659	2.026	0.463	0.155
Rich	0.306	0.363	0.507	0.547
Access to credit use				
Available credit use	-0.707	1.886	0.515	0.170
No availability of credit use	1.605	8.254	0.559	0.004*
Access to market information				
Some time	0.343	0.163	0.852	0.687
Always	-5.637	24.523	1.138	0.456

5. CONCLUSION AND RECOMMENDATION

In conclusion, this research work aimed to identify determinants of urban youth unemployment in Guder town. The studies were employed Binary logit regression model. In the model unemployment status of urban youths were taken as dependent variable and seven explanatory variables were included. The result of the binary logit models, show that five of the explanatory variables were found significant determinant to urban youth unemployment; of which, Sex, educational level, marital status, skill match and access to credit use. The study found that certificate graduate and above becomes more exposed to unemployed. Therefore, the government and concerned bodies should review job market regulation in order to enhance educated youths to be employed which can help them to contribute their role for their country. Moreover, emphasis should be given when new education programs are opened; a detailed study is required in order to make a match between the demand and supply of education since match between individuals acquired skill and knowledge with the market demand is one factor for unemployment. It is revealed that youths which have no access to credit use were more unemployed. Thus, intervention is required to financing youth through participating all private investor, government offices and NGOs. Moreover, the study recommends that the concerned bodies should try to create suitable environment condition through identify employment opportunities. Final the government should facilitate formalization of familiar employment sector in order to motivate more youth to engage in different activities which reduce the problem of youth unemployment especially on skilled and educated youth in both urban and rural areas.

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