

DETERMINANTS OF YOUTH UNEMPLOYMENT IN WOLDIA TOWN, NORTH WOLLO ZONE, AMHARA REGION

A Thesis Submitted In the Partial Fulfillment of the Requirements for the Degree

Of

MASTER OF SCIENCE (MSC)

IN

DEVELOPMENT ECONOMICS

by

NEBRO HAILU KEBEDE (ID GSE12023)



Departments of Economics

Faculty of Business and Economics

Woldia University

July 2022

Woldia, Ethiopia

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APPROVAL SHEET

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DECLARATION

I, Nebro Hailu (I.D. No. GSE12023), hereby certify that the work embodied in this MSc thesis is my own bona fide work carried out by me under the supervision of Tigabu Molla (PhD) at Department of Economics, Woldia University, Woldia, Ethiopia. The matter embodied in this MSc. thesis has not been published in this form or another nor has it been submitted for evaluation to another examination authority for the award of any other degree/diploma. I declare that I have faithfully acknowledged, given credit to and referred to the research workers wherever their works have been cited in the text and the body of the thesis. I further certify that I have not wilfully lifted up some other's work, Para, text, data, results, etc. reported in the journals, books, magazines, reports, dissertations, theses, etc., or available at web-sites and included them in this MSc thesis and cited as my own work. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in my submission. I understand that any violation of the above was because for disciplinary action by the University. The Similarity Index is below permissibly limited.

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(Name & Designation)

STATEMENT OF CERTIFICATION

This is to certify that this thesis entitled "determinants **DETERMINANTS OF YOUTH UNEMPLOYMENT IN WOLDIA TOWN, NORTH WOLLO ZONE, AMHARA REGION**" embodies the work carried out by Nebro Hailu Kebede himself under my supervision and that is worthy of consideration for the award of the MSc degree.

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LIST OF ABBREVIATIONS

- CSA = Central Statics Agency
- FDRE = Federal Democratic Republic Of Ethiopia
- GDP = Gross Domestic Products
- HHI = Household Income
- HHS = Household Size
- ILO = International Labor Organization
- MOY = Ministry of Youth Sport and Culture
- NGO = Non Governmental Organization
- UN = United Nation
- WB = World Bank
- WHO = World Health Organization
- JLMPS = Jordan Labor Market Panel Survey
- GMM = Generalized Method of Moments
- UNESCO = United Nations education science cultural organization
- ARDLM = Auto Regressive Distributed Lag Model
- MLE = Maximum Likelihood Estimation
- LMI = Labor Market Information

ABSTRACT

Now days, the growth of youth unemployment is one of the critical socio-economic problems facing Ethiopia. It creates many economic and social problems in the economy. The intensity of the problem is high in urban areas in general, woldia town in particular where youth face serious difficulty in getting employment. The objective of the study is to identify the determinants of youth unemployment in Woldia Town, North Wollo Zone, and Amhara Region. To achieve its objective both primary and secondary data source were used. The primary data was collected from 203 sample youths through structured questioner from six kebele of the town. The researcher used multi -stage stratified sampling technique. The data analysis was conducted by using descriptive analysis and econometrics (binary logit regression analysis) to come up with the results. From the collected data out of 203 sample youths 114 (56.16%) are employed and the rest 89 (43.84%) unemployed. From the total 89 unemployed respondents 64 (71.9%) of respondents are characterized as belonging to frictional unemployment, 12 (13.5%) structural unemployment and the rest 13(14.5%) to cyclical unemployment type. It can be discerned from these figures that the majority of unemployed (about 85.5%) suffer from the long run unemployment. The study also employed binary logit model to identify determinants of youth unemployment. Accordingly the findings of the study show that the predictors gender, job preference and household size have positive and significant effects on youth unemployment at 5 percent level of significant. The rest predictors, namely, education level of the youth, job training, access to social network ,parental education access to credit service ,household income ,migration status, age, work experience and marital status of youths affect youth unemployment negatively and significantly at 5 percent level of significant. Based on the findings several recommendations are made. It is recommended that more focus be given on development interventions targeting the long run unemployment (frictional and structural unemployment). It is also important to facilitate and step up the private sector investment, accesses of credit service, youth training. The task of fighting youth unemployment cannot be done by the government alone so there is a need to galvanize all concerted efforts from all actors.

Key Words: Unemployment, Youth, Binary Logit, Woldia Town.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

Youth unemployment is one of the key global labor market challenges. The international labor organization (ILO) stated that around one fifth of the world's young people are not in employment, education, or training. Despite economic recovery, unemployment remains high and youth are more likely to be unemployed than adults around the world (ILO, 2018). Unemployment is a problem for both developed and developing countries, however the impact and intensity might differ among nations and it gets global attention to reduce its impact on economic development, even if the effect differs among nations (Kassa, 2012). the international labor organization estimates for 2017 indicates that the global youth unemployment rates is about 13%. There are about 70.9 million unemployed youths worldwide. The problem is severe in developing countries, where about 13.8% of the youth are unemployed (ILO, 2018). in many African countries youth unemployment is a concern of governments and policy makers for many reasons because the youth represents a large shear of the population in these countries and to break the vicious circle of poverty and under development there is a need to channel the youth effectively in to productive activities.

Consequently, the level of unemployment of a country is widely used as overall status indicators in evaluating the current performance of the economy. Studies indicate that many nations in the world, particularly developing countries, have serious problem of unemployment that could affect their economic performance. According to ILO (2016) some countries that have been characterized by high unemployment rate of age 15+ are South Africa (27%), Lesotho(27.8%), Occupied Palestinian (27.0%), Swaziland (26.3%) and Mozambique (25.2%).Whereas, countries with the lowest unemployment rate are from southern Asia ,such as, Qatar, Cambodia, Thailand, Myanmar, and Bahrain and few African countries such as Niger(0.3%) & Rwanda (0.9%). According to the ILO's new estimation, based on improved data sets and methodologies, the global unemployment rate is fall slightly to 5.5 percent in 2018 (from 5.6 per cent in 2017), which marks a turn around after three years of rising unemployment rates. (ILO, 2018 cited in Dereje, 2019).

In Ethiopia, the aggregate unemployment rate is below 10 percent. But the unemployment rate in urban is eight times higher than rural unemployment. For example, CSA (2016) report indicates that unemployment rate in urban areas accounted 16.5 percent whereas only 2 percent in rural. In addition, female unemployment has higher probability of being not employed compared to males. According to statistical report on the 2018 urban employment unemployment survey result reveals that unemployed population in urban areas of the country was 1,770,294 with unemployment rate of 19.1 percent. This means that about 19 persons are unemployed out of 100 economically active persons aged ten years and above. And also the result shows that, the total un-employment rate depicts a declining from 17.5 percent in 2012 to 16.8 percent in 2015 and thereafter increases from 16.9 percent in 2016 to 19.1 percent in 2018. The differentials of unemployment rate by sex demonstrate female unemployment rate (26.4 percent) is more than double as compared to male (12.2 percent).

As survey result statistical report also shows, the rate of unemployment for youth 25.3 percent covers 1,096,936 youth unemployed population, which was higher than that of the total, adult and older age categories. Female and male youth unemployment rates were 30.9 percent and 19.0 percent, respectively. The overall youth unemployment rates show a fluctuating trend from 2012 to 2018. The same is holds true for each sex during the last five survey periods. However, female youths are characterized by higher percentage of unemployment rate compared to their male counterparts (CSA, 2018). Urban unemployment problem is higher among youth. January, 2020 CSA survey reveals that unemployed population in urban areas of the country was 2,018,479 with unemployment rate of 18.7 percent. This means that out of 100 economically active persons about 19 persons are unemployed. The differentials of unemployment rate by sex demonstrate female unemployment rate (26.1 percent) is more than double as compared to male (12.7 percent). January 2020 is 1,249,878 with the unemployment rate of 25.7 percent, which was higher than that of the total, adult and older age categories.

Female and male youth unemployment rates were 31.7 percent and 18.8 percent, respectively. As of the report Central Statistical agency (2018) shows from the region of Ethiopia Amhara regional state contribute the largest share of unemployment population to total urban areas of the country with 19.7 unemployment rate, this implies that the share of unemployment rate to the country total go along with the population size of urban areas of each regions. However despite theoretical justification for the determinants of urban unemployment and its impacts on socio economic development have been conducted in urban towns of Ethiopia for instance (Shita and Dereje, 2018) identify and examine the factors which determine urban youth unemployment in East Gojjam zone, Ethiopia, his findings shows age, work experience, skill match, social network, and family prosperity and migration status were found to be significant determinants of urban youth unemployment in the area.

Based on these we can infer that urban unemployment among urban towns are different among towns based on individuals characteristics, institutions, culture, and other factors. In addition, it can have dynamic nature which needs to be investigated through research and , identification of those determinants of unemployment and its paths is very important to formulate proper employment related policy that helps to reduce years. In 2020 according to the regional technical and enterprise bureau, there were 1,059,961 economically active youths in Amhara region. From this total youth, it was able to employed or create 757,787 job opportunities. In spite of the fact that the study area woldia town is one of the Amhara region urban towns that shows lowest achievement in creating job opportunities based on woldia worda technique and enterprise office yearly job creation performance report shows that 65% .

Duet o lack of credit, shortage of sheds, lack of electric power, political instability during the war between Tigray and Ethiopian forces, several zones of the Amhara region were taken over by the Tigray forces and destroyed many infrastructure. Privately in cafes and restaurants; the war has contributed to the increase in the number of unemployed in Woldia town, as young people employed by NGOs have been displaced. And also lacks of good governance were factors responsible for this low job creation. According to the woldia town Technical vocational enterprise office report indicates that, the job creation performance is by far below the expected for all kebeles.

1.2. Statement of the Problem

Youth unemployment is one of the major socio-economic problems and it is one of the greatest economic concerns not only in Ethiopia but also in the world. The effects of youth unemployment are social too not only economic. Commonly, crime rates rise as people are unable to meet their needs through work. Divorce rates often increase due to people cannot solve their economical problems, the rate of homeless increases, as do the rates for mental and physical illness, homes are foreclosed upon or abandoned, and neighborhoods decline as result. In general, the effect of youth unemployment is adverse. Youth unemployment is not a good thing for anyone in society, and even the people who remain employed with as a result. Ethiopia is one victim of the consequences of youth unemployment.

Unemployment affects generally urban population, particularly youth population in urban areas. Adams (2007) also noted that in developing countries, though overall unemployment is higher due to slow growth and job creations. Generally youths and particularly females are the most affected ones or males in the same year. This means that youth unemployment rate is much higher than average country's .When we come to Amhara region the urban unemployment rate is increases year to year (CSA key finding) indicates 2016, 2018 and 2020 unemployment rate is 17.9, 19.7 and 20.4 respectively. This tells us that there high urban unemployment rate in Amhara region. According to the projected population data in 2020, the size of population of the town Woldia is 88,294 of which 44,667 and 43,627 is male and female respectively. And also woldia town finance and economic development office data indicates in (2021) population size of the town increased from 113,958 to 118,858 in (2022). This implies that the town manifests the problem of rapid population growth when we see youths from the total population size of the town. Youths population in 2013 and in 2014 which is 41293 and 43105 respectively. This indicates that 40% of the total population is youth age (15-29).

The facts displayed that youth population is one of the segments of the town population affected by the problem. So, under this circumstance;, where the population growth is alarming and rural urban migration is continuous due lack of job opportunities in the rural areas of the zone, high youth unemployment would be occurred in the town.

There was a research which was conducted by Central Statistical Agency (CSA, 2018) of Ethiopia by using a multistage stratified cluster sampling. From this research, the regional variations, access to electric power, age, gender, youth's access to market information, economic status of youths' families and youth's educational level were found to be the significant determinants of youth unemployment in Ethiopia (Abshoko, 2016). The problem here is that the researcher used the UN definition of youth and involved only those youths whose age was ranged between 15-24 which is out of the (MOY, 2004) definition of youth for Ethiopian context. Hence, in order to combat such problems, the researcher tried to conduct this analysis by extending and contextualizing the definition of youth in to Ethiopia's definition of youth that is from 15-29. The other researcher Amenu Leta Duguma, (2019) studied the determinants of urban youth unemployment in the case of Guder town. The researcher used binary logit model estimation show that sex, educational level, marital status, skill match and access to credit use of youth were 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.

Fundamentally, three basic issues were motivated the researcher to be carry out this study: the first is most studies done in the country focus only the determinants of youth unemployment but this paper includes the type and size of unemployment in the study area. The second is that because of the high rate of youth unemployment as indicated by the realistic evidence above. Thirdly, the determinants of youth unemployment also in the town have not yet well assesses so far in woldia town and there is also time variation since the previous researchers carried out.

Under this circumstance where the population growth is alarming and rural urban migration is continuous due natural resource degradation as an effect of climate change and shortage of job favorable conditions in the rural areas of the zone, high youth unemployment would be occurred. So, the study also assessed the reason behind youth unemployment in the study area using different surveying data of socio-economic and demographic determinants. Regarding to the determinant factors, though there are two major categories of determinants of unemployment such as macro determinants and micro determinants, the researcher was concentrates only micro determinants of youth unemployment such as demographic and socio

economic factors. This is because it is wider task to measure the macro determinants youth unemployment for the research at individual level.

Hence, the foremost intension of the study is to identify the factors that determine youth's unemployment. However, to the best of my knowledge, no studies were conducted on the determinant of youth unemployment in the town and have received research attention so far. Identification of those determinants of youth unemployment is necessary to prepare proper employment related economic policy that helps to reduce youth unemployment rate for the country as general and for the study area particularly. This study was supported by the following research questions:

- What are the major characteristics of youth unemployment in the study area?
- What type of unemployment exists in the study area?
- What are the determinants of youth unemployment in the study area?

Therefore, given the above problems and research questions this research was find out solutions and formulate stated objectives for the study of the determining factors of youth unemployment and searching for remedies is not negotiable.

1.3 Aim and Objective of the Study

1.3.1 Aim of the Study

The aim of this study is to identify the determinants of youth unemployment in woldia town.

1.3.2 Specific objectives of the Study

The specific objectives of this study are:

- To explore characteristics of youth unemployment status in the study area.
- To identify the size and type of unemployment in the study area
- To identify the major determinants of youth unemployment in the study area

1.4 Significance of the Study

Youth unemployment is a thoughtful socio-economic problem in Ethiopia and it is more severe in the study area particularly. Since the major objective of this study's to identify the determinants of youth unemployment in woldia town. It has the following significance:

- The study is restricted to a single town. So, it is helpful to considerate the determinants of youth unemployment in Ethiopia in general and specifically of woldia town.
- The paper is useful for the formulation of policies and strategies that assist the alleviation of youth unemployment.
- The paper serve as a bench mark in order to undergo further analysis on the subject.

1.5. Scope of the Study

This study focuses mainly on the determinants of youth unemployment in woldia town. Although according to United Nation's definition, the youth comprises of the age limit 15-24 but for the purpose of this study, the term youth follows the Ethiopian context definition of those persons between the ages of 15 and 29 years (FDRE, 2004).

1.6 Organization of the Study

The research paper is organized into five chapters. The first chapter covers, background of the study, statement of the problem, objectives of the study, significance, and scope of the study. The second chapter covers the review of related literatures. The third chapter is methodology of the study and the fourth chapter is results and discussion and the fifth chapter also were discussed conclusion and recommendation.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Chapter two consists of relevant literature relating to youth unemployment. This chapter first covers the introduction ,concepts & definition of youth unemployment, Theoretical Literature , and demographic and socio- economic determinants of youth unemployment in detail and then goes further to explore empirical literature of youth unemployment ,conclusion then finally conceptual frame work.

2.2. Definition and concepts of terms

Youth; In the case of Ethiopia youth consist of portion of the society whose age ranged between 15-29 years (FDRE, 2004). So, my study focuses on youths from 15-29years. According to the United Nation (UN), youth is defined as a person between the ages of 15-24 years. Whereas (WHO), youth is defined as a person between 10-24 ages. Youth is best understood as a period of transition from the dependence of childhood to adulthood's independence.

Job; according to World Development Report 2013, Jobs is defined as “activities that generate actual or imputed income, monetary or in kind, formal or informal.

Unemployed: is a person without work but looking for work or available and ready to work during a reference period (ILO, 2010).

Employed: is a person engaged in productive activity during the reference period as paid employee or self-employed (ILO, 2010).

Household: Consists of a person or group of persons, irrespective of whether related or not, who normally live together in the same household and housing units and have common cooking and eating arrangements (CSA, 2012).

Unemployment rate: the fraction of the labor force that is unemployed, i.e. the number of unemployed divided by the total labor force (ILO, 1992).

Youth labor force: - Consists of people between 15 and 29 years old who are either working or actively looking for work, excluding youth who are economically inactive (MOY, 2004).

2.3 . Theoretical Literature

2.2 .1.Types of unemployment

Several types of unemployment may be experienced in an economy such as that of Ethiopia and they include: frictional, seasonal, cyclical and structural unemployment.

2.2.1.1. Structural Unemployment

Structural Unemployment, one types of unemployment, is associated with the mismatch of jobs and workers due to the lack of skills or simply the wrong area desired for work. Structural unemployment depends on the social needs of the economy and dynamic changes in the economy software. Workers who find themselves in this situation find that they need to acquire new skills in order to obtain a new job (ILO, 2007). Structural unemployment is hard to separate empirically from frictional unemployment, except to say that it lasts longer. In other words Structural unemployment is unemployment which is the outcome of absence of demand for the workers that are available. There are two major reasons that cause absence of demand for workers in a particular industry.

1. **Changes in Technology:** As personal computers replaced typewriters, typewriter factories shut down. Workers in typewriter factories became unemployed and had to find other industries to be employed in.

2. **Changes in Tastes:** If bagpipes become unpopular, bagpipe companies went bankrupt and their workers were unemployed. Seasonal unemployment may be seen as a kind of structural unemployment, since it is a type of unemployment that is linked to certain kinds of jobs (construction work, migratory farm work).

2.2.1.2. Frictional Unemployment

Frictional Unemployment is always present in the economy, resulting from temporary transitions made by workers and employers or from workers and employers having inconsistent or in-complete information. This type of unemployment is closely related to structural unemployment due to its dependence on the dynamics of the economy. It is caused because unemployed workers may not always take the first job offer they receive because of the wages

and necessary skills. This type of unemployment is also caused by failing firms, poor job performance, or obsolete skills. This may also be caused by workers who quit their jobs in order to move to different parts of the country. Frictional unemployment can be seen as a transaction cost of trying to find a new job; it is the result of imperfect information on available jobs. For instance, a case of frictional unemployment would be a college student quitting their fast-food restaurant job to get ready to find a job in their field after graduation. Unlike structural unemployment this process would not be long due to skills the college graduate has to offer a potential firm (ILO, 2010).

2.2.1.3. Cyclical Unemployment

Unemployment that is attributed to economic contraction is called cyclical unemployment. The economy has the capacity to create jobs which increases economic growth. Therefore, an expanding economy typically has lower levels of unemployment. On the other hand, according to cyclical unemployment an economy that is in a recession faces higher levels of unemployment. When this happens there are more unemployed workers than job openings due to the breakdown of the economy. This type of unemployment is heavily concentrated on the activity in the economy. to understand this better take a look at our Business Cycles section. For instance, advances in technology and changes in market conditions often turn many skills obsolete; this typically increases the unemployment rate. For example, laborers who worked on cotton fields found their jobs obsolete with Eli Whitney's patenting of the cotton gin. Similarly, with the rise of computers, many jobs in manual book keeping have been replaced by highly efficient (ILO, 2009).

2.2.1.4. Seasonal unemployment

It arises when workers are laid off during off seasons. This type of unemployment is common in sectors such as agriculture. Other concepts related to unemployment are long-term unemployment and hidden unemployment. **Long-term Unemployment:** Long-term unemployment in European Union statistics, defined as unemployment lasting for longer than one year. **Disguised (hidden) Unemployment:** Disguised occurs when people do not have full time employment, but are not counted in the official unemployment statistics. This may include:

People on sickness / disability benefits (but, would be able to do some jobs)

People doing part time work.

People forced to take early retirement and redundancy

2.2.2. Theories of Unemployment

Theoretical perspectives and economic literature explains unemployment from different angles. For instance, neoclassical economist sees it as a voluntary because the labor market is believed to be permanently in equilibrium based on the assumption of flexible wages and perfect market information Boating (2016). The causes of unemployment are different among economists for instance according to Keynesian economist's unemployment occurs when there is no enough aggregate demand and economy fail to provide jobs for everyone who wants to work. This is due to real wages rigidities result in low output and high unemployment this cause unemployment according to Mankiw (2002). In addition, according to neoclassical framework is structural unemployment is created by a mismatch between demand for labor and the skills of jobseekers whereas Frictional unemployment caused by lack of labor market information, increasing the time that jobseekers take to locate and move into a new job and the time and resources that employers take to identify and recruit suitable workers to fill vacancies failure to obtain the relevant information (Phelps, 1970). Philips curves (Phillips, 1958) and Oakum 'slaw (Okun, 1962) provides the basic theoretical connections between unemployment and macroeconomic variables.

As Philips curve shows an inverse relationship between the growth rate of wages and unemployment rate in Britain and it is accepted inflation-unemployment tradeoff since price increases were highly correlated with wage increases, Correspondingly, Okun's (1962) work, which formed the theoretical basis for the demand side explanation to unemployment, studied the adjustment of real gross national product in response to unemployment variations. His findings showed that real gross national product variations and unemployment changes have an inverse relationship, and that any percentage change in unemployment exceeding four percent was associated with an approximately three percent fall in real GDP. When natural rate of unemployment, below unemployment rate ,is directly related to gross national product gap. The

theoretical issues of unemployment attempts to explain the causes and effects of unemployment in many nations. Economic literature provides many Explanations for the determinants of unemployment. Some causes blame the economic systems, and others blame other factors such as foreign debt and population growth. Still, other theories shift the problem to external sources and shocks, or unpredictable events, and other argue that technology and labor market institutions are the causes of unemployment. In addition, other theories assumed that deficiency in aggregate spending and innovations are the essential factors for explaining the problem of unemployment.

Unemployment is measured using the following three criteria: (i) without work (ii) available for work and (iii) seeking work (ILO, 1990). However, this definition varies in the context of developed and developing countries. In the developed countries where the labor market is largely organized and labor absorption is adequate, unemployment is measured based on the standard definition of the seeking work criteria that is having taken active steps to search for work during specified reference period. On the other hand, in developing countries like Ethiopia, where there is no strong labor market information, labor absorption is inadequate and where the labor force is predominantly self-employed, the standard definition with its emphasis on seeking work criteria is somewhat restrictive and might not fully capture the prevailing employment situation. So, in order to measure the unemployment depending on the existing labor market situations special provisions are made to relax the definitions. The relaxed definition which measures unemployment in relation to “without work” and “availability for work” criterion is found to be more plausible in most developing countries. The relaxed definition of unemployment, which relatively suits the Ethiopian labor market situations, includes persons who had no work but available for work. They may either seeking work or not seeking /discouraged job seekers/. Discouraged job seekers are those unemployed who want a job but not taking any active steps to search for work because they thought that job is not available in the labor market.

2.2.2. 1. Human Capital Theory

According to this theory, education is considered as an important asset for economic development as well as securing decent and productive job. Schultz (1961) noted that education plays a great and significant role in the economy of a nation. It increases the productivity and efficiency of people by increasing the level of cognitive stock of economically productive human capability which is a product of innate abilities and investment in human beings. He further illustrated that education increases the chances of employment in the labor market, allows people to reap pecuniary and non-pecuniary returns and gives them opportunities for job mobility, and leads to greater output for society and enhanced earnings for the individual worker. He furthermore, stated that higher education provides the skills needed to perform complex jobs, making people more productive, thus sustaining economic growth. People with the most human capital are said to be the most productive, and thus secure the best jobs and the highest salaries. Thus, education plays an important role in determining the employment status of an individual

2.2.2.2. Social Capital Theory

The necessity of social capital begins in the work of the James Coleman, Francis Fukuyama, Robert Putnam, and Pierre Bourdieu; 2011 as cited by (Aslefew, 2011). Whereas these four scholars vary in disciplinary base and emphasis, they contribute to a focus on feature of social relations, namely, values, norms, and networks or social capital and the role they play in social cohesion. Community is central to theories of social capital in that norm, values, and networks produce and reproduce communities, are they geographical, face-to-face neighborhood communities, informational communities and networks, or civic communities of social or political engagement. Social capital is concerned with specific types of social bonds that sustain a sense of connection among individuals. Popular anxieties about a loss of community have entered social scientific discourse through the concept of social capital. This theory advances on the necessities of the social relation which help as the means to find a job. While there may be broad agreement about the specific elements of the social that are collectively called social capital, there are very important differences among these key theorists. Those who have weak social relation with others are marginalized and damaged with lack of in accessibilities of information which makes them to missed job opportunities in some degree, in addition poor

social relation leads to friendless and discriminate them from the community. (Bourdieu's, 2011) notion of social capital does not fit into this continuum, which, broadly speaking comes from a consensual, functionalist model of society. Bourdieu operates within a conflict model of society, and his emphasis is on how networks recreate unequal social relations. The consensual perspective tends to regard social networks as equally available to all. In the conflict perspective, all social groups have networks, but not all networks provide equal access to resources. Socially bounded and stratified networks reproduce those unequal social relationships

2.2.2. 3. The Job-Matching Theory

The concept of Job-matching depends on the labor market and the idea contains different multi-disciplinary professional skills with respective experience levels. As (Jovanovich, 1979) pointed out positions that need skilled person are occupied by most educated adults as cited by (Aslefew, 2011). A mismatch between the skill sets of the unemployed and the needs of employers is the main reason behind structural unemployment. The mismatch comes about because the unemployed are unwilling or unable to change skills or to move to a location where their skills are in demand. As a result, it becomes very costly to match workers with jobs and unemployment is often prolonged. For example, businesses in a certain area may require young people with advanced information technology skills.

A young person living in this area but without these skills was have difficulty finding a job his/her skills are not matched to the demand. Down a similar line of reasoning, a young person with the required skills set but living in an area where these are not in demand because employers are looking for agricultural workers, was have an equally difficult time finding work or may become underemployed. An important trend in labor markets in more developed economies, influenced to a large extent by globalization, has been a steady shift in demand away from the less skilled toward the more skilled. This is the case however skills are defined, whether in terms of education, experience or job classification. The result of the changing composition of labor demand has led, and is leading, to a reduction in the number entry-level, unskilled jobs, resulting in a mismatch for young people with low education and skills levels. Cyclical unemployment can also influence skills mismatches. Skills mismatches are generally caused by two factors. Firstly, at a general level, the school curriculum may not provide the

skills employers are looking for. In most education systems, there is still a clear lack of practical and experiential learning as well as of teamwork learning. Experiential learning is very rarely used, as an effective way of gaining knowledge and experience, yet it is probably the most powerful way of learning entrepreneurship. Moreover teachers and university professors often have only limited experience in, and understanding of, small businesses and self-employment. So they are not adequately trained or educated to teach entrepreneurial skills young people. Secondly, the absence, or inaccuracy, of Labor Market Information (LMI), i.e. information on what skills are in demand and where jobs are, was lead to many young people making a choice of career that is not based on the realities of the labor market.

2.2.2.4. The Theory of Job Search

Stephen and Jackman formulated the theory of job search. For Stephen and Jackman (1991), a typical unemployed person looking for work is expected to pass three stages. At stage one; he/she collects information about job vacancies. Vacancies come with different pre-assigned wage and conditions. In stage two, he/she decides to apply for the vacancies that he/she learns of. The decision to apply for it depends on the expected value of getting a job or not. Lastly, he/she accepts the offer of any job for which he/she applied in getting it. The success of individual's application depends on his/ her personal characteristics. Thus, they concluded that individual factors and the degree of competition from other job seekers could affect the chance of finding a productive job.

2.4. Factors That Influence Youth Unemployment

Youth unemployment is the outcome of different socio-economic and demographic factors at macro and micro level. The micro level factors are directly associated to individuals' demographic and socioeconomic attributes while the macro level factors are related to the national issues (Toit, 2003). This study emphasizes on assessing individuals' demographic and socioeconomic attributes that influence youth employment. These are broadly classified as demographic and socio-economic factors. The detail is presented as follows.

2.4.1 Demographic Factors of Youth Unemployment

2.4.1.1. Rural Urban Migration

The movement of young people is one of the causes for the high levels of urban youth unemployment problem in most developing countries (Raphael, 2005). Since young people view migration as an avenue to improve their status and learn new skills, they move in to urban areas for various reasons (Harris, 2010). Similarly, ILO (2007) and MOY (2004) noted that migration of young people in their twenties is very high in Africa. Moreover, they also state that youth often move to institutions for education and training, but many migrants move for employment related reasons followed by their families. In line with this, Okojie (2003) depicted that migration of youth has resulted in a concentration of youth in cities and towns where there are few jobs available in modern sector establishments. In addition to this, Todaro (1994) and Mlatsheni and Rospabe (2002) state that rural to urban migration of young and educated people is the very root cause for the high and ever rising levels of urban unemployment. A study conducted by Anh *et al* (2005) and Yisak (2006) showed that youth having migration experience are more likely to be unemployed than other migrants. Confirming this, Nwuke (2002) noted that young migrants are highly unemployed in urban areas. He further stated that in a context where social relations are as crucial as qualifications, young urban migrants searching for a job face an uphill struggle of surviving, with limited social networks Sarr (2000) also reaffirmed that youth migrants are three times more unemployed than other migrants in Africa. It might be possible to deduce that young migrants are more vulnerable to unemployment in urban areas.

2.4.1.2. Sex

According to Hallerid and Westberg (2006), being one of the demographic variables, sex reveals substantial differences between female and male with respect employment opportunity. Females are vulnerable both in short term and long term unemployment than males. ILO (2004a) also conforms the activity rate of young males have been much higher than that of young females due to the different opportunities society provide to males and females, and domestic activities for personal or household use. Strengthening this point, Mlatsheni (2002) and Rospabe (2009) found that lack of employment is more severe for females than for males as

63 percent of economically active females are unemployed whereas 53 percent of males remain without jobs in South Africa. They further noted that one of the reasons behind females' unemployment is that girls spend much time in doing domestic work than boys. This leads them to poor academic performance and sometimes withdrawal from education. It could be concluded that girls therefore end up with less education and limited skills, and thereby resulting in high number of unemployed females. In the same manner, differences between male and female with respect to employment has also been prevalent in Ethiopia. With this regard, Guracello and Rosati (2007) state that female youth across all ages are more likely to be unemployed and are much more likely to be jobless than male youth. Another research conducted by Berhanu *et.al* (2005) noted that unemployment rate among young female (20.24) was 38.7 percent while it was only 23.2 percent for young male in the same age category during the same year. Besides, the CSA (2010) unemployment report also shows that out of 1,168,591 unemployed persons 41.2 percent were female youth.

2.4.2. Socio-Economic Factors of Youth Unemployment

2.4.2.1 .Education

Education is one the basic factors of youth employment. The achievement of lower educational level reduces the chances of getting decent and productive jobs in the world of work In line with this, Salvador and Kiplinger (2008), WB (2009), and Morris (2006) noted that unemployment rate of less educated youth tends to be higher than the unemployment rate of more educated youth in developing countries because their skills and competencies may not correspond to the demand of the labor market, In other words, the chance of getting employment for more educated youth is higher as compared to lower educated youth since they had the required knowledge and skills, Similarly, Mlatsheni and Rospabe (2002) found that young people with secondary level education (from grade 8 to grade 12) do not have a better chance to get a job than people with no education. ILO (2004a) also confirms that young people with some education are vulnerable to unemployment due to the lack of knowledge and skills required by the labor market. Accordingly, unemployment is higher for youth had lower educational level in Africa.

With this respect, Okojie (2003) stated that unemployment in Africa concentrated among youth who have received some education, He further added that youth who had limited education lack the industrial and other skills demanded in the labor market, thereby making them unattractive to employers who prefer skilled and experienced workers. Confirming this idea, Haji (2007) and Anh *et al* (2005) found that youth who attain limited education are more prone to unemployment in the continent. In addition to this, they noted that, training in Africa remains largely unrelated to the labor market needs, which foster the existence of a degree of mismatch between the demand for and supply of education. In the same fashion, less educated youth has also been faced the challenge of being unemployed in Ethiopia. In this regard, Guracello and Rosati (2007) found that among youths, the less educated youth face more difficulties in finding employment in urban areas of the country.

2.4.2.2. Work Experience

According to ILO (2004), the lack of work experience reduces the chances of getting employment in the modern sectors of the economy. On the other hand, it also added that young people having work experience, something very much desired by most employers, increases the possibilities of getting employment. Similarly, a study conducted by Foot (1986) found that because of limited work experience and other personal characteristics, youth young entrant from the labor force. Anh *et al* (2005) and Hassen (2005) also illustrated that be-side to insufficient work experience, poor work habits, unreliability, and lack of dedication to the job lead to the segmentation of young workers. They further noted that employers are usually hesitant to hire young people who have little or no practical work experience since the costs to retrain and/or upgrade skills of young workers are often too high. As a result, youths are suffering from the lack the work experience, so that they spend considerable time in looking for a job.

2.4.2.3 Household Income

Household income is one of the socioeconomic factors that contribute to the problem of youth unemployment. ILO (2004) indicated that unemployment rates among young people tend to decline as household income increases. Youths who reside in a better off family had higher chance of getting employment since their family tends to invest more in the education of their sons or daughters. Likewise, a research conducted by Anh *etal* (2005) and Rees and Gray

(1982) found that family income serves as an important factor in determining the employment experience of Vietnamese youth. A family in which a young person lives is the strongest predictor of his or her future in the job market. On the other side, they added that youth who reside in low income earning family are less employed in the labor market.

Correspondingly, Morris (2006) showed that the significant effects of family economic status, paternal occupation, education and parental divorce are notable in affecting the employment status of youth. He further noted that a better income earning household had a number of opportunities, i.e. higher income can enable youth to have greater access to education, information and connections. This could facilitate easy access to employment opportunities available in the market. Also ILO (2010) reveals that young people who reside in low income household have higher likelihood of being unemployed than adults of being among the working poor. It also indicates an estimated 152 million young people were living in poor households (with per-capita expenditure below US\$1.25 a day) in 2008, were unemployed. Strengthening this point, a study conducted by Echebiri (2005) depicts that unemployment has affected youths from a broad spectrum of socioeconomic groups, both the well and less well educated, although it has particularly stricken a substantial fraction of youths from low income backgrounds.

2.4.2.4. Mothers and Fathers Education

Social network and status in family background have too much influence on youth unemployment. If parents are unemployed, low education, live in poverty, are likely to replicate similar style to the youth people, in the same way. Anita (2012) explained that family background in education has its own impact on the supplementation of youth to the labor market and also they stated that the higher the parents are educated, the less number of firms visited, and large proportion of youth who have got job. (UNESCO, 2012) indicated that as a measure of social status, family education's is an important factor in determining employment status of youth. So, youth who had well educated parents could face less difficulty in getting jobs compared with those youth whose parents were less educated or illiterate. Similarly, Schiefelbein and Farrell (1982) stated that family background in particular father education has an impact on the insertion of youth to the labor market.

They also indicated that the higher the education of the father, the smaller the number of firms visited, and the higher the proportion of individuals who have found employment. Furthermore, Morris (2006) noted that as a measure of social status, father education's is an important factor in determining employment status of youth. Therefore, youth who had well educated father could face less challenge in finding jobs compared with those youth whose father were less educated or illiterate.

2.4.2.5. Job Preference

Instead of perceiving for rewarding employment, self or otherwise, the youths waited for the government to find employment for them (ILO, 2010). The Ethiopian government has these days eyed on creating much more job opportunities for a number of citizens thereby reducing youth mobility caused by poverty, through innovative policies that was create jobs and businesses for young people in micro and small enterprises, urban agriculture, agricultural undertakings both in rural urban areas (Xinhua, 2019). A study conducted by Echcbiri (2005) in Nigeria found that most young job seekers preferred employment in the private sector. They would like to work in banks, oil companies, manufacturing companies, major marketing companies, and so on. While a large proportion of youth also preferred to work in the public sectors. With this regard, Berhanu *et al* (2005) indicates wrong kinds of attitudes and job expectations on the part of youth is prevalent, including the preference for white collar jobs as opposed to agricultural and manual work. Moreover, they state that one of the reasons for wrong kinds of attitudes towards jobs is the inadequacy and excessively academic orientation of the educational systems of the country, and the result is still visible in the current situation. Therefore, job preference could be seen as a factor for youth unemployment (Asalfew, 2011).

2.4.2.6. Social Networks

Social capital is key properties to search employment. Social networks are vital instrument to find a job in urban areas with less expense and difficulty Social capital (Adams, 2008). Found that youth who use social networks in finding employment are successful. On the other hand Coleman, (1990) and Granovetter (1983) they also showed that young workers not utilizing personal networks may miss job opportunities available through personal networks. Similarly, Fernandez and Kelley (1995) also confirmed that youths with limited or deficient personal

networks may lack knowledge of employment opportunities available in the state or regions. Consistently, Holzer,(1996) also discussed that the lack of labor information can be harmful to young people labour market outcomes, which are influenced by an individual's access to employment information via social networks. Toti, (2003) also noted that lack of labor market information and access to the main information networks in the labor market decreases the chance of getting employment.

2.5. Unemployment in Ethiopia

Ethiopia is the second-most populous country in sub-Saharan Africa. As of 2016 the population exceeded 100,000,000 and as of January 2018 stood at over 106,380,626, based on the latest United Nations estimates. An estimated 45 percent of the population is under age 15 and 71 percent under age 30. Youth unemployment is high, estimated to be around 7 percent; with about 25 percent of youth ages 15 to 29 reports being underemployed. Unemployment is reported to be more prevalent in urban areas. However lack of employment opportunity for young people still drives rural-to-urban migration and leads many to emigrate (EDC, 2018). In urban Ethiopia based on urban employment unemployment survey the total economically active population is 10,780,552 were male 5748675 and female 5031874 from this active population unemployed is 2018190 which is 703420 male and 1314770 female where the unemployment rate indicates also male 12.2 ,female 26.1 and total unemployment rate 18.7 (CSA2020 urban employment unemployment survey).when we see the urban youth employment unemployment statics from the total urban youth (15-29) which is male 2,241,218 female 2,614,162 and 4,855,379 total economically active youth out of this unemployed youths male 421,269 female 828,609 totally 1,249,878 youths unemployed in urban Ethiopia .

Table 2.1 Amhara region urban areas unemployment survey

	Male	Female	Total
From the total urban population			
Economically active population	1192835	1115211	2308049
Unemployed population	155946	315840	471786
Unemployment rate	13.1	28.3	20.4
From the total urban youth (15-29)			
Total urban youth population	477367	582594	1059961
Unemployed youths	94014	208160	302174
Unemployment rate	19.7	35.7	28.5

Source: FDRE urban employment unemployment survey CSA 2020

From this survey data indicates that the unemployment rate is higher in female than males both from the total population and youth population. Below Table 2.2 shows that woldia town job creation performance is low based on yearly job creation performance.

Table 2. 2 Job Creation Performance of Woldia Town

No	Woldia town kebeles	Job creation as per the expected
1	Tefaze(02 kebele)	58%
2	Deber Gelila (01 kebele)	65%
3	Admass Bashager(03 kebele)	65%
4	Yejue Genet (04 kebele)	66%
5	Defergia (05 kebele)	68%
6	Adiseketema (06 kebele)	51%

Source: 2022 Woldia Worda Technique Enterprise Office

2.6. Empirical Evidences

Alawad et al., (2020) studied and analyzed the determinants of youth unemployment in Jordan by using Multinomial logistic regression model using data based on the Jordan labor market panel survey (JLMPS) in 2016 and the study reveals that youth employment in Jordan is determined by gender, educational level, geographical location, and marital status. In Ethiopia different studies have been conducted on unemployment this section presents studies conducted in different region of Ethiopia. For instance, Shita and Dereje (2018) Determinants Of Urban Youth Unemployment; Evidence From East Gojjam Zone, Ethiopia by using primary data and binary logistic regression based on their result the study shows that age, work experience, skill match, social network and family prosperity are identified as negative and significant determinants of urban youth unemployment, education and migration status of urban youths affected unemployment positively and significantly.

Jote (2019) examined Demographic and Socio-economic Correlates of Youth Unemployment in Ambo Town, Oromiya National Regional State. The study used Primary data. Descriptive analysis and binary logistic regression model were used to analyze the data. Based on the findings of the study sex, age, marital status, migration, income status of the Household, father's education, mother's education, work experience, services significantly determine youth employment in Ambo Town. Educational level, job preference, and access to social network density were found insignificantly related to youth employment.

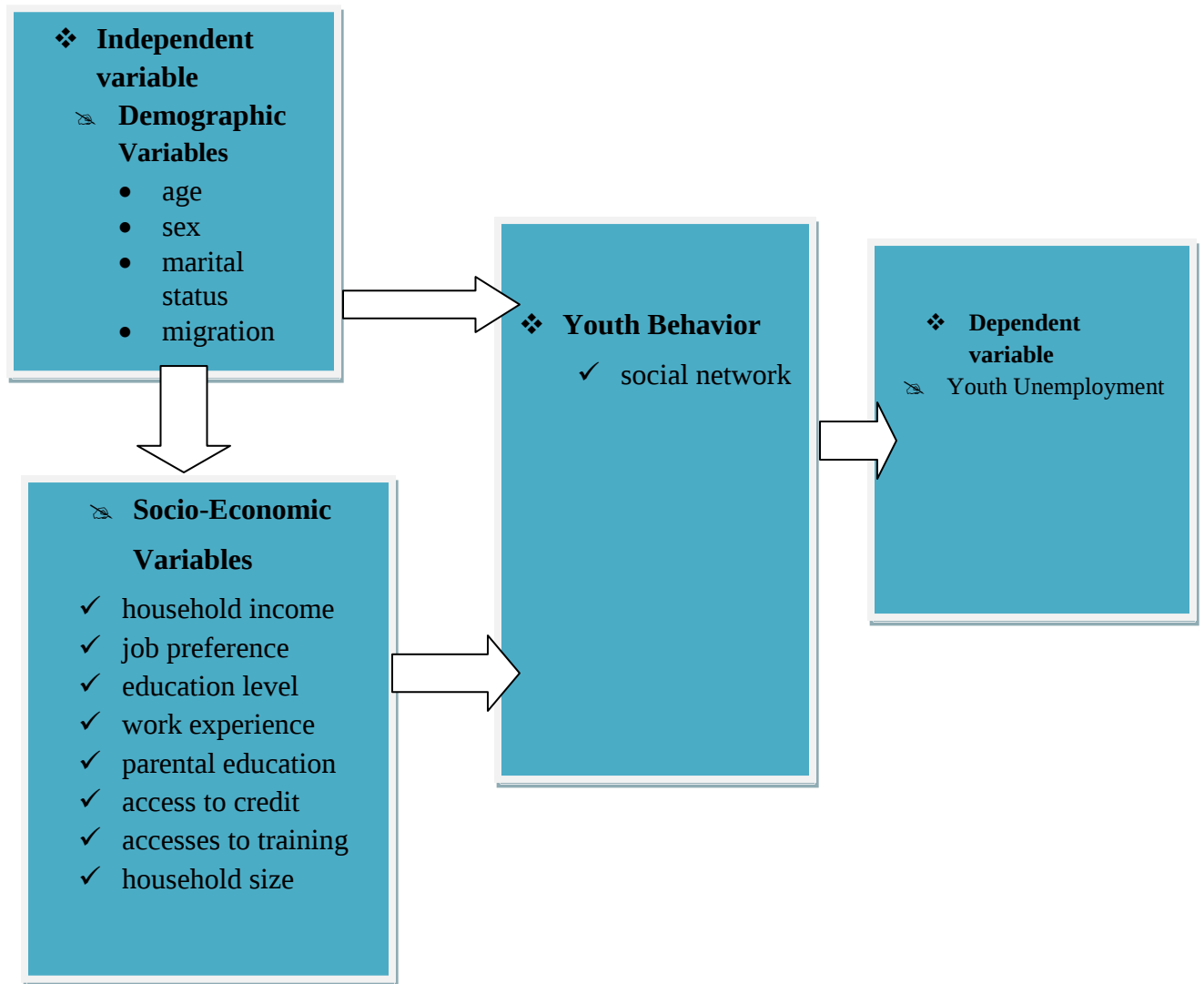
Dejene et al., (2016) assess the determinants of youth unemployment at Ambo, Ethiopia. Their result indicated that among the demographic variables, age of the respondents and migration status were significantly related to youth unemployment whereas marital status of the respondents was not significant. From the human capital variables included in the model, education and health status of the respondents were significantly related to youth unemployment, whereas participation in employment related trainings was not statistically significant. Among the economic determinants, household income, access to credit and saving services and work experience were significant.

Asmare and Mulatie (2014) stated the major factors supposed to be affecting urban youth unemployment, particularly graduates from higher institutions. These were: lack of good governance (nepotism, corruption, bias and discrimination), lack of social networks, divergence between skills and the labor market and low quality educational policy and system. According To Nganwa et al (2015), between 2006 and 2011, the prevalence of urban youth un-employment was high as compared to the total unemployment rate in Ethiopia.

The study showed that place of residence (regions), gender, age, and marital status significantly affect the urban youth unemployment. Aynalem Shita *et al* (2016) examined the factors which determine urban youth unemployment in East Gojjam zone of Amhara Region, Based on the result of the logit model, seven of the explanatory variables were found significant determinants of urban youth unemployment; of which age, work experience, skill match, social network, and family prosperity affects unemployment negatively whereas education and migration status of urban youths affects unemployment positively. The finding of the study indicated that urban youths who attend higher education are more unemployed compared to illiterate at 10% level of significance. However primary and secondary education did not affect unemployment significantly. In addition, it is found that migrant urban youths are more likely to be unemployed compared to non-migrants

2.8. Conceptual Framework

Figure 2. 1 Conceptual Frame Work of Youth Unemployment



Source: Developed by Researcher 2022

CHAPTER THREE: METHODOLOGY

3. 1 Description of the study area

Woldia Town is found in North Wollo Zone, Amhara Regional State of Ethiopia. The absolute location is 11°50' N altitude and 39°36' E longitude. The relative location of the town is 520 Km north of Addis Ababa and bordered by Habru Woreda in the South, Gubalaftow Woreda in the West and East, and Raya Kobo Woreda in the North and Northeast as shown. Woldia is characterized by rugged topography that governs the drainage pattern and makes the flow of the surface water down to Shele stream. But in the area there are no perennial rivers and lakes. The area is also characterized by Woyena Dega (subtropical) Climatic zone with the altitudinal 2300-2400 m above mean sea level having an average annual rainfall of 850 mm and 22°C average daily temperate. Woldia is one of the most developing towns, a trade center across Djibouti co rider. Based on the 2021 national census conducted by the Central Statistical Agency of Ethiopia (CSA), this town has a total population of 113,958, of whom 58,019 are male and 55,939 female. The majority of the inhabitants practiced Ethiopian Orthodox Christianity, with 80.49% reporting that as their religion, while 18.46% of the population they were Muslim.

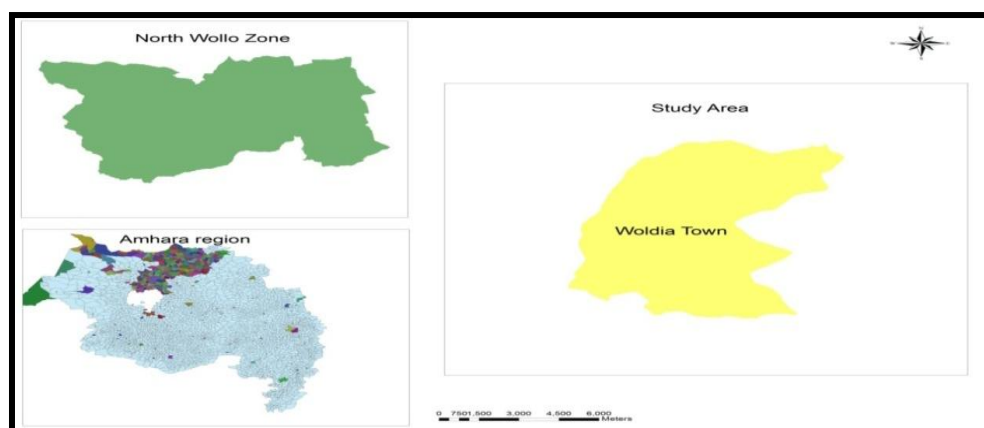


Figure 3. 1 Study Area Map

3.2. Research Design

In order to achieve the objectives of the study, the researcher used both qualitative and quantitative approaches. Data collected from primary and secondary sources. Primary data was obtained through questionnaires. The secondary data were obtained from, administrative office documents, internet. Data analyzed using both (descriptive and econometrics) approaches. Across sectional primary data collected from the selected respondents in the study area through structure questionnaire at a time of 2 014 E.C. the questionnaire was design in such a way that could help the investigators dig out detail information on respondents demographic, social and economic characteristics.

3.3. Type and Sources of Data

Quantitative and qualitative nature of the data and the data were collected from a primary and secondary source. Secondary data also taken from Woldia worda technical vocational Enterprise development office, Woldia worda finance and economy development office and CSA published document.

3.4. Method of Data Collection

The researcher gave an orientation for the respondents. The orientation includes explaining objectives of the study, procedure of data collection, how to approach the respondents and respecting the willingness and ethical values of the respondents by considering norms and culture of the study area. Orientation also was given on how to manage systems of identifying mistakes and gave correction. It was also given attention on how to reduce non-response by effective follow up through asking questions or re-interviewing besides to editing keeping the quality of the data. The study used a cross-sectional study design and largely used primary data.

The target populations incorporate youth aged 15-29 years those live in Woldia town because of using the age of 15-29 that was Ethiopia's national youth policy (2004) defines youth as those age (15-29) .The questionnaire, which consists of structured questions, prepared collected information on both demographic and socio economic characteristics of the respondents. the questionnaires originally prepares in English and for ease of understanding by respondents are translated into a Amharic that it helps to assess the content, clarity, and logical flow of the questions and the time needed on average to fill out a single questionnaire. Depending on the

results of the survey, the data collection instruments are finalized after making the necessary corrections and reorganizations.

3.5. Sampling Techniques

Sampling is the process of drawing a sample representative of the target population to make inferences about the characteristics of the population based on those of the sample. In sampling the identification of a target population and unit of observation is critical. The target population is the young population living in Woldia town and a young individual (It could be employed or unemployed) is used as a unit of observation. Multi-stage stratified sampling design was used in order to select respondents who live in the study area during the reference period.

First stage: In the first stage of selecting sample from Woldia town kebele was used as a stratification factor. There are six kebeles in the town, namely, Defergia, Yejue Genet, Admase bashager, Debere gelila, Tefaz and Adis ketema.

Second stage: In the second stage proportional sample from each kebele was drawn using purposive sampling. The study used this sampling method as it is difficult to get a sampling frame to use other methods. Once the proportional sample was determined, the proportional sample from each kebele was drawn using purposive sampling. The proportional samples of all kebeles are provided in table 3.1.

3.6 Sample Size Determination

The study was conducted on youth who are ages (15-29) years in the study area Woldia town. 203 sample size from the total youth population 43105 of youths dwelling were selected based on the formula given by Yamane (1967). To determine the sample size, the researcher used 7% level of precision due to the reason that most of the living condition of the youths in Woldia town is similar. Therefore, 7% level of precision was applied to select the representatives of the urban youths' in the study area as noted by Yemane (1967).

$$n = \frac{N}{1+(N)(e)} 2$$

Where; N = the total youth population size of Woldia town

e = the desired level of precision (e=7% or 0.07)

n= the sample size.

$$n = \frac{N}{1+(N)(e)} 2 = \frac{43105}{1+(43105)(0.07)} 2$$

$$\frac{43105}{212.2115} \approx 203$$

- In order to determine the number of sample respondents from each those six kebeles, the researchers applies the proportional sample determination technique as follow;

$n_i = \frac{N_i}{N} n$ Where n_i = is the proportional sample taken from each sample kebele

N_i = the total youth population of each respective sampled kebele

N = is the sum of the total youth population of the town

n = is the total sample size to be taken

Therefore, the distributions of samples in the urban six kebeles are shown in the table below;

Table 3. 1 Proportional Sample Size

No	Kebeles	Number of youth	Proportional sample size
1	Defergea	7858	37
2	Yejue Genete	7627	36
3	Admase Bashager	7530	35
4	Debere Gelila	7528	35
5	Tefaze	6702	32
6	Adis ketema	5860	28
	Total	43105	203

Source: woldia town finance and economy office 2022

3.6. Methods of Data Analysis

Descriptive and econometric analyses stated about unemployed to meet the objective of the study. in the case of descriptive analysis tables, average and percents ,mean ,standard deviation were used .while the econometric analysis was analyzed in STATA version 13.0 software . Binary logit model was applied and identify the major determinants of youth unemployment in the study area. As many econometric and related literature recommended that, specifying the association between a dichotomous dependent variable and a set of relevant explanatory variables, binary outcomes models are recommended were appropriate (Wooldridge, 2001).

3.7. Model Specification

Logistic regression is popular modeling approach when the dependent variable is dichotomous. This model allows one to predict the log odds of outcomes of a dependent variable from a set of variables that may be continuous, discrete, categorical, or a mix of any of these. Hosmer and Lemeshow (2000) have described logistic regression focusing on its theoretical and applied aspect. Often the outcome variable in social data is, in general not continuous, instead is binary. In such a case, binary logistic regression is a useful way of describing the relationship between one or more independent variables and a binary outcome variable that has only two possible values. Indeed, a generalized linear model is used for binary logistic regression.

The most attractive feature of a logistic regression model is that it neither assumes linearity in the relationship between the covariates and the outcome variable, nor does it require normally distributed variables. It also does not assume homoscedasticity and in general has less stringent requirements than linear regression models. Thus logistic regression is used in a wide range of applications leading to binary dependent data analysis (Hilbe 2009 Agresti, 2002). Logistic model, as compared to its competitor, the probit model, is less sensitive to outliers and easy to correct a bias. In instances where the independent variables are categorical or a mix of continuous and categorical, logistic analysis is preferred to discriminate analysis (Agresti, 2007). The assumptions required for statistical tests in logistic regression are far less restrictive than those for ordinary least squares regression. There is no formal requirement for multivariate normality, homoscedasticity, or linearity of the independent variables within each category of the response variable. However, the assumptions that apply to logistic regression model include: meaningful

coding, inclusion of all relevant and exclusion of all irrelevant variables in the regression model and low error in the explanatory variables

3.7.1 Model

To identify key determinants of youth unemployment computed a dichotomous variable indicating whether the youth are employed or unemployed. The dependent variable is youth unemployment status. The response variable is dichotomous. If the i th individual is unemployed, the response variable (Y_i) takes the value 1 otherwise it takes the value 0. Where the individual may be classified as either employed or unemployed

$$Y_i = \begin{cases} 1, & \text{if the } i\text{th youth is unemployed} \\ 0, & \text{otherwise} \end{cases}$$

Following Gujarati (2004) the logistic model was 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 was be unemployed (P_i) to the probability that he/she was be Employed ($1-P_i$).

$$P_i = f(Z_i) = f(\alpha + \beta X_i) = \frac{1}{1 + e^{-(\alpha + \sum \beta_i X_i)}} \dots \dots \dots (3.1)$$

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

$$(1-P_i) = \frac{1}{1 + e^{-Z_i}} \dots \dots \dots (3.2)$$

$$\frac{P_i}{1-P_i} = \frac{1 + e^{Z_i}}{1 + e^{-Z_i}} = e^{Z_i} \dots \dots \dots (3.3)$$

$$\text{Therefore; equation (3.3) is written as } e^{(\alpha + \sum \beta_i X_i)} \dots \dots \dots (3.4)$$

Taking the natural logarithm of equation (3.4) we have the following

$$Y_i = \ln\left(\frac{P_i}{1-P_i}\right) = \alpha + \sum_{i=1}^k \beta_i X_i + U_i \dots \dots \dots (3.5)$$

P_i : is the probability that the youth is unemployed in the labor market

1-Pi: is the probability of youth is employed

Where: K=the number of explanatory variables; Xi= vector of independent demographic and socio-economic variables of individuals, U = the error term, α = is the value of the log odd ratio. $\frac{P_i}{1-P_i}$. When X or explanatory variable is zero, and β = measures the change in L (logit) for a unit change in explanatory variables (X). The dependent variable is dichotomies or dummy variable where it represents (1) when the youth is unemployed and (0) when the youth is employed

$$Y_i \frac{P_i}{1-P_i} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \beta_9 X_9 + \beta_{10} X_{10} + \beta_{11} X_{11} + \beta_{12} X_{12} + \beta_{13} X_{13} + U_i$$

$$Y_i \frac{P_i}{1-P_i} = B_0 + B_1 AGE + B_2 MRS + B_3 MIG + B_4 HHI + B_5 HHS + B_6 AC + B_7 ASN + B_8 JP + B_9 JT + B_{10} GEN +$$

$$B_{11} WE + B_{12} EDU + B_{13} PEDU + U_i$$

Where: (GEN) Gender, (AGE) Age ,(EDU) Education, (MRS) Marital Status (HHI) Household Income, (ASN) Accesses to Social Network, (M IG)Migration Status, (JP) Job Preference (PEDU) Parental Education , (WE) Work Experience ,(AC) Access to Credit, (JT) Job Training and (HHS) Household size .

3.7.2. Variable Descriptions

3.7.2.1. Dependent Variable

The dependent variable is youth unemployment is the binary response variable either if the youth individual is unemployed or employed, the response variable (Yi) takes the value 1 unemployed and employed it takes the value 0.

3.7.3.2. Independent Variables

Gender: in the list of independent variables one of the demographic variable which is taken in the model is sex of a respondent and it grouped as (0) male (1) female and in the model male is takes as a reference category. And it may have negative or positive effect

Age : this is a factor which shows age of the youth in year from the given age boundary (15-29) and hypostasized or expected signs to have a negative influence on the dependent variable youth unemployment status .and measures at by using year.

Migration status: the other factor which also projects to persuade the youth unemployment status of a respondent is migration status and categorized as (0) migrant (1) non-migrant. Migration in this case refers to the internal migration from rural area to the urban areas (rural-urban) migration. In this study non-migrant resident are takes as a reference category in regression model analysis and have expected as positive effluence on youth unemployment.

Educational Level: educational status of a respondent refers to the highest grade level of a respondent completed rather than institutional participation. Years of schooling, that it reflects the variation in the level of respondent's knowledge in supporting access to employment. Education expected to have negative effects to youth unemployment. In this study the respondents it taken as continuous variable measures as year of schooling.

Job Preference: this study was be focuses on how the option of job accessibility in the labor market affects the unemployment status of the respondents in their life situation. During the analysis is grouped as (0) self-employment preference and (1) Choosing paid employment or in Government and any organization, for this study in the model selection of self-employment jobs preference in the labor market is considered as a reference category.

Household Income: in human being life direct or indirect income is mandatory to survive on this challenge full world mainly at house level monthly incomes of youth parents. It measures using Ethiopian birr and have expected as negatively affects on youth unemployment since as household income increases the unemployment level of households decreases.

Social Network: in this digital age period the social network is the key factor for the chasing of the wanted things, mainly for the sake of this study it helps for the sharing of information and idea exchange to search for the accessibility jobs in the labor market. So then having too tied social network helps to get information and share idea because he/she is densely populated among the people so social network density is having relation with people to communicate each other. Social network density can also affect the employment status of the respondents; it is regarded in the model being classified as (0) no social networks, (1) social network and no social network was be taken in the model as reference category.

Parental Education: educated families are the key determinants for their children's future life, parents educational status is taken as the factor for the respondents during survey period mainly of educated parents. Parental education level taken as a continuous variable and measured by year of schooling and the expected sign is negatively affects on youth unemployment.

Marital Status: marriage has its own social value in the formation of family if it is managed properly and the process undergoes in the right age and economic status. For the purpose of this study marital status taken as variable that affects the unemployment status of respondents have negative or positively affects on youth unemployment .it is categorical variable (0) married (1) unmarried and married taken as a reference category.

Work Experience: work experience expected or hypothesized as negatively affects youth unemployment and refers to the length of time period that the respondents had been engaged in productive works such as self-employment, paid employment or others previous experiences in any type of works in year prior to the survey date. The variable was taken as a continuous variable and measured per year.

Job Training Service ; the variable refers to whether the respondent has got advisory services in the form of training, skill upgrading, entrepreneurial management and other services from government or NGO's. Accessibility to business advisory service is, therefore, expected to influence the unemployment status of a respondent, can be categorized as (0) not received job training services (1) received at least once. In the model, respondents who did not have received job training service at least once are taken as a reference category.

House Hold Size : in the list of independent variables one of the variables which is taken as in the model is house hold size of respondents as continuous variable and measures numerical and have positive influence on dependent variable (youth unemployment.)

Accesses for Credit : in the list of independent variables one of the variable which is taken as in the model is accesses for credit of a respondent and it is group as (0) no access for credit (1) has accesses for credit and in the model no access for credit is taken as a reference category. the accesses of credit have a negative influence on unemployment status of youth.

Table 3. 2 The Summery of Independent Variable (Expected sign)

	Variable	Description	Values/Category/	Reference/Category/	Expected sign
1	Yi	Youth unemployment status	0=employed 1= unemployed	Dependent variable	Dependent variable
2	GEN	Gender status	0=Male 1=Female	Male	+
3	AGE	Age of respondent	Continuous variable	-	-
4	MRS	Marital status	0=Married 1=unmarried	Married	+
5	EDU	Education level	Continuous variable	-	-
6	JP	Job preference	0=self- employment 1=paid job	Self-employment	+
7	ASN	Accesses to social net work	0=no social 1=has social	No social network	-
8	PEDU	Parental education	Continuous variable	-	-
9	HHI	Household income	Continuous variable	-	-
10	WE	Work experience	Continuous variable	-	-
11	JT	Job training	0=non trained 1=trained	Non trained	-
12	AC	Accesses to credit	0=no access 1=has access	No accesses	-
13	HHS	Household size	Continuous variable	-	+
14	MGS	Migration status	0=Migrant 1=non migrant	Migrant	-

Source: Developed by the researcher (2022)

CHAPTER FOUR: RESULT AND DISCUSSION

4. 1. Introduction

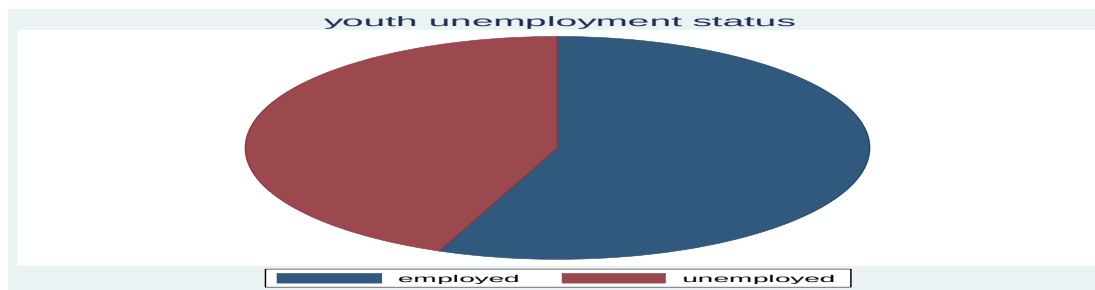
This chapter is organized introduction, descriptive analysis; demographic characteristics of respondents, socio-economic characteristics of respondents, unemployment type of respondents, econometrics analysis: determinants of youth unemployment.

4.2. Descriptive Analysis

The descriptive result is used to explain the demographic and socio economic factors in terms of youth unemployment in woldia town. When during the data collection from the total sample size 203 respondents which were necessary for the descriptive analysis of the finding therefore descriptive statics of the respondents based on cross-sectional data collected. The characteristics and current unemployment status of the youth in woldia town by all demographic and socioeconomic predictor variables such as sex, age, marital status, migration status, education, social network, access of credit and job preference, household income, work experience, parental education, house hold size and job training are presented in this section by using Tables, chi square tests and pie charts.

4.2.1 Unemployment Status of Respondents (Yi)

The dependent variable is unemployment status of respondents .from the total of 203 sample respondents the majority of the respondents 114(56.16%) were employed .while the rest of 89 (43.84%) un employed youths. the figure 4. 1 shows the unemployment status.



Source: survey Data, Woldia town 2022

4.2.2 Demographic Characteristics of Respondents

Table 4. 1 Chi square Test Demographic characteristics of respondents

Variable	Category	Total	%	Employment status				Chi2	p-value
				Unemployed		Employed			
				No	%	No	%		
Gender	Male	154	75.86	57	64.04	97	85.08	12.085	0.001
	Female	49	24.14	32	35.96	17	14.92		
	Total	203	100	89	100	114	100		
Marital status	Married	143	70.44	57	64.5	86	75.44	3.116	0.078
	Non -married	60	29.56	32	35.95	28	24.5		
	Total	203	100	89	43.8	114	56.2		
Migration	Migrant	119	58.62	71	79.7	48	42	29.238	0.000
	Non-migrant	84	41.38	18	20.3	66	58		
	Total	203	100	89	43.8	114	56.2		

Source: survey Data, Woldia town 2022

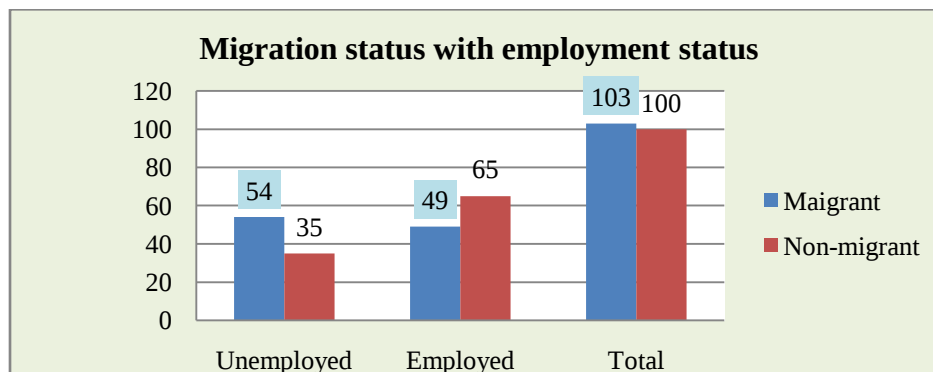
Gender was one of the variable which utilized to analyzed the demographic characteristics of respondents the percentage of each sex independently has calculated out of the total respondents about 154 (75.6%) were male and 49 (24.4%) were female . unemployment rate of female and male respectively 20.7 % and 15% this indicates that high unemployment rate in female than males. Regarding its association the chi-square test indicated that there is statically significance association between gender and youth unemployment status.(Chi-square=12.0859,p-value=0.001) then, the result clearly show that there was statically significant difference youth unemployment status between male and female. The chart below shows the association between employment status and gender.



Figure 4. 2 Unemployment with Gender Status

Source: survey Data, Woldia town 2022

Migration status: Out of the total 203 respondents, 47.5 % of them were migrant and 58.62% non migrant. The unemployment rate of migrant and non migrant respectively 21.4 and 59.6% .migrants unemployment rate is higher than non migrant's .show Table 4.1 above. The association the chi-square test indicated that there is statically significance association between migration status and youth unemployment status. (Chi-square =29.2386, p-value=0.000) then, the result clearly show that there was statically significant association to youth unemployment status between migrant and non-migrant.

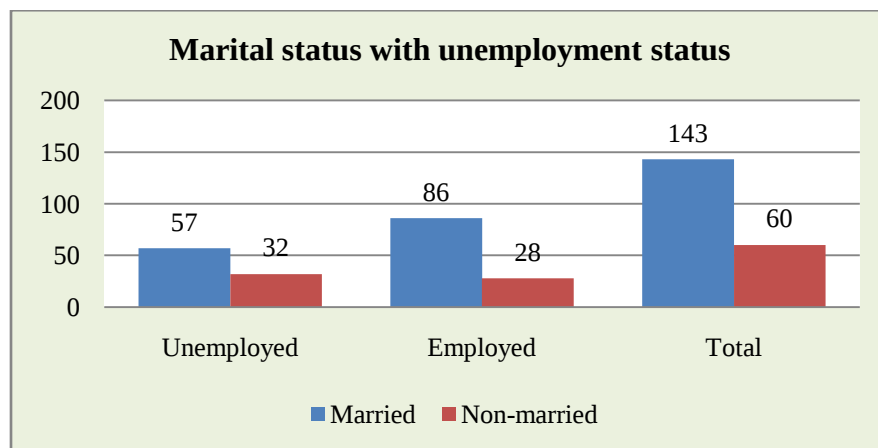


Source: survey Data, Woldia town 2022

Figure 4. 3 Migration Status With Unemployment

Marital status about 143(70.4%) of respondents are married, while the rest 60(29.6%) were unmarried. the association between marital status and youth unemployment status chi-square test indicates that ($\chi^2 = 3.1162$ and $p\text{-value} = 0.078$). meaning that marital status statically significant association with unemployment status. the chart below shows the association between employment status and Marital status.

Figure 4. 4 Marital Status with Unemployment



Source: survey Data, Woldia town 2022

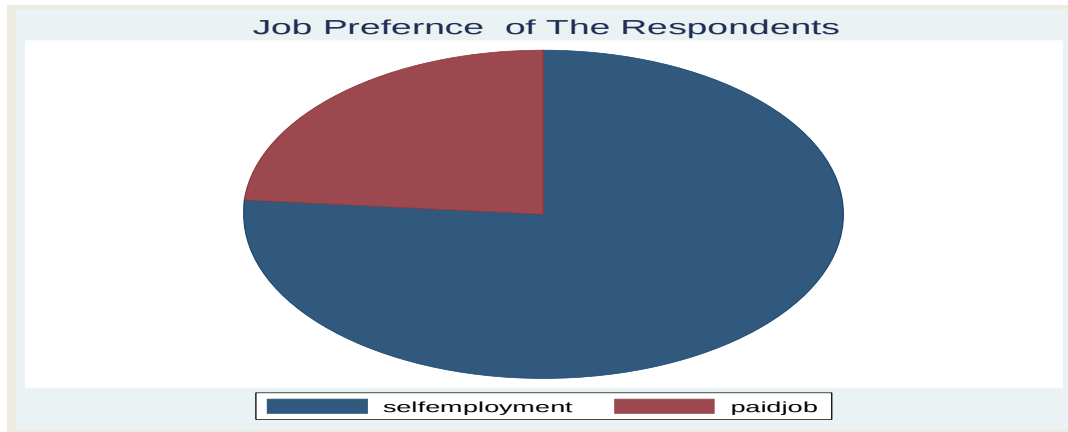
4.2.3. Socio-Economic Characteristics of Respondents

Table 4. 2 Chi square Test of Unemployment Status with Socio-Economic Discrete Variables

Variable	Category	Total	Employment status				Chi ²	p-value
			Unemployed		Employed			
			No	%	No	%		
Job preference	Self -employment	48	28	31.4	20	17.5	5.36	0.021
	Paid job	155	61	68.6	94	82.5		
	Total	203	89	43.8	114	56.2		
Social network	No-social network	114	68	76.4	74	64.92	26.32	0.000
	Has social	89	21	23.6	40	35.08		
	Total	203	89	43.8	114	100		
Job training	Non-Trained	48	27	30.33	21	18.4	3.93	0.047
	Trained	155	62	69.6	93	81.6		
	Total	203	89	43.8	114	56.2		
Accesses to credit	No accesses	144	60	67.4	84	73.6	24.70	0.000
	Has access	59	29	32.6	30	26.4		
	Total	203	89	43.8	114	56.2		

Source: survey Data, Woldia town 2022

Job preference and unemployment status of the youth association .the chi-square test indicated that there is statistically significant association between is (chi-square = 5.3616,p-value =0.021) the result clearly show that there were statically significant difference youth unemployment status between youth prefer jobs and self-employment and paid job .Out of the total respondents 155(76.35%) preferred self-employment and 48(23.65) preferred paid jobs . See (Table 4.2).



Source: survey Data, Woldia town 2022

Figure 4.6 Job preferences of the respondents

Accesses to credit service: The categorical explanatory variable credit service also the chi-square test result shows that there is statically significant association between credit service and youth unemployment status of the youth. (Chi-square =24.7097and p- value =0.000). credit service and youth unemployment status of the youth cross tabulation proportion result also show that 55.7% has no accesses to credit service while 44.3% has accesses to credit service and from the total 89 unemployed were 60 (67.4 %) has no accesses to credit service . the rest 29(32.6%) were has accesses to credit . the majority of the respondents had no accesses to credit service and the unemployed respondents also has no accesses to credit service more than has accesses to credit service .see (Table 4.2).

Accesses' to Social net work: from the total sample size, has no accesses to social network 114(56.16%) whereas the rest 89(43.84%) has accesses social net work. according to the chi-square test social network and youth unemployment have significant association (chi-square =26.3872,p-value=0.000) clearly indicates that statically significant and strong association between unemployment status of the youth and accesses to social network.(See Table 4.2)

Table 4. 3 Continuous variable (tab Yi, su (Age)**Summery (AGE, HHI, WE, HHS, PEDU and EDU)**

Continuous variable	Unemployment status	Mean	Std.Dev	Freq.	Min.	Max.
Age	Employed	23.97	4.348	114	22	29
	Unemployed	22.68	4.300	89	15	29
Household income	Employed	3549.14	3101.82	114	1236	10000
	Unemployed	2131.53	2003.83	89	1236	10000
Work experience	Employed	2.25	3.81	114	0	13
	Unemployed	0.82	1.58	89	0	10
Household size	Employed	3.35	2.19	114	0	10
	Unemployed	5.6	2.08	89	0	10
Parental education	Employed	2.77	3.43	114	0	12
	Unemployed	2.39	3.21	89	0	12
Education level	Employed	9.89	4.83	114	0	16
	Unemployed	6.60	2.73	89	0	16

Source: Stata result 2022

From the respondents the mean age and standard deviation has significance difference between unemployed and employed respondent. Table 4.3 clearly shows that the mean age and standard deviation of employed youths have 23.97 and 4.348 respectively. While the unemployed also mean age and standard deviation, 22.68 and 4.300. According to the respondents response the minimum household income was 1236 birr and the maximum incomes of the household also 10000 birr .the mean of the respondents household incomes were 2825.78 birr. Another important socio-economic variable of the respondents is the household size of their family .the respondents were asked the size of household the smallest or minimum size is 0 and while the maximum size of household is 10 and the mean also 4.34 another data collected from respondents was their education level of the youths. the lowest or minimum level of education 0 or illiterate and the maximum level of education of respondents 16 and the mean 8.45.information also collected from respondents on the parental education level .minimum and

maximum level of education 0 and 12. According to the information obtained from sampled respondents on their work experience, the minimum and maximum work experiences of respondents 0 and 10 while the mean is 1.62.

4.2.4. Types of unemployment of based on Respondents response

Table 4. 4 The Unemployment History of Respondents

Unemployment history (For how long you become unemployed?)	Respondents		Frequency	Percentage
	Male	Female		
One week to 6months	26	9	35	40
>6months to 12 months	12	17	29	32
Above 12 months	9	3	12	13.5
No Demand for My Skill	10	3	13	14.5
Total	57	32	89	100

Source: survey Data, Woldia town 2022

From the descriptive analysis it was possible to identify the types of unemployed in the town from the total 89 unemployed respondents 64 (71.9 %) were fractionally unemployed. The kind of unemployment dominated in the study area was termed as in this research as fractional unemployment caused by voluntarily leaving Job ,finishing school recently, planning to returning to labor force based on the ILO definition of unemployment. Temporary ,spend up one year looking for the right jobs ,natural part of the job search process they could be counted among the frictional unemployment type.

About 12 (13.6%) unemployed respondents were above for twelve months and more or long - term. in other words more likely to face long term unemployment for more than 12 months. This type of unemployment this is structural unemployment. Unemployment is created due to the mismatch between requirements of jobs and the qualifications of the unemployed, which is captured by skill not matching with job requirement in this research.

While the rest almost 13(14.5%) of them were no demand for this type of unemployment is cyclical unemployment. At the time cyclical unemployment starts, economies are generally already in a recession. Businesses generally wait until they're sure the downturn is severe enough to warrant layoffs before initiating them. As such, the conflicts between Ethiopian forces and Tigray forces brought private sector employers and self employers fail and displaced from their jobs. As a result, those unemployed youths mentioned above were cyclically unemployed.

4.3. Econometrics Analysis

The chapter attempts have been made explaining the determinants of youth unemployment. as mentioned earlier in the methodology part logit model was selected and the third specific objectives to identify the determinant of youth unemployment in the study area. Before regression analysis and interpreting first we should to check test of goodness of fit of the model, check multicollinearity and Heteroskedasticity tests.

4.3.1 Post -Estimation Diagnostic Test

4.3.1.1 Test of Goodness of Fit of the model

Since to check the model fit by using Hosmer-Lemeshow test; Goodness-of-fit tests

The hypotheses: H_0 : the model fits the data Vs H_a : the model does not fit the data.

Table 4.5 Tests of Significance Hosmer -Lemeshow Test

Logistic model for Y_i , goodness-of-fit test

number of observations =	203
number of groups =	8
Hosmer-Lemeshow chi2(8) =	3.74
Prob > chi2 =	0.8798

Stata Outcome, 2022

Hosmer-Lemeshow Goodness of fit test statistic is If the p-value of the greater than $\alpha=0.05$, we fail to reject the null hypothesis that there is no difference between observed and predicted values, implying that the model fits the data at an acceptable level. The value of Hosmer-Lemeshow statistic has chi-square value of 3.74 and a p-value of 0.8798 indicating that the model has a good fit as shown in Table 4.5. This shows that there is no significant difference between the observed and predicted model values and hence the model fits the data well.

4.3.1.2 Classification Logistic model for Youth unemployment

The sensitivity the numbers of unemployed youths correctly predicted by the binary logit model is 92.13 % and specificity the number of employed youths correctly predicted is 94.7 % of the observation and the percent correctly predicted value of the logit model is 93.6% (see appendix -6). Therefore, binary logit model under consideration fits the data very well and fairly

4.3.1.3 Omitted Variable Test (ovtest)

Testing for omitted variable bias is important for our model since it is related to the assumption that the error term and the independent variables in the model are not correlated ($E(e|X) = 0$) The null hypothesis is that the model does not have omitted variables bias, the p-value is higher than the usual threshold of 0.05 (95% significance), so we fail to reject the null and conclude that we do not need more variables. Based on the ovtest Prob > F = 0.0623 therefore accept the null and reject the alternative hypothesis (see Appendix 6)

4.3.1. 3 Multi Co linearity Test

To check multicollinearity we used the variance inflation factor (VIF) to detect the problem of multi-co linearity among the explanatory variables. The larger the values of (VIF).The more co linearity among the variable. as the general a rule of thumb, if the VIF of a variable exceeds 4 warrant further investigation while VIF excesses 10 are signs of serious multicollinearity requiring some correction . But in this study the mean value of VIF is 1.85,(See Appendix 2) this indicates that among the explanatory variables have no serious multi-co linearity problems. in particular the variance inflation factors for J^{th} predictor is : $VIF = \frac{1}{1-R^2}$ where R^2 = value obtained by regressing the J^{th} predictor on the reaming predictors

4.3.1.3 Heteroskedasticity test

The problem of Heteroskedasticity makes the data estimators inefficient, because the estimated variance and co-variance of coefficients are biased and inconsistent. According to Breusch -pagan cook-Weisberg test for Heteroskedasticity, if the p-value is below the chosen significance level, we reject the null hypothesis of homoskedasticity (Gujarati 2004). In this study according to Breusch -pagan cook-Weisberg test for Heteroskedasticity (p-value = 0.3328) this indicates that $0.3328 > 0.05$ meaning that accept the null (homoscedasticity) and reject the alternative hypothesis. See Table 4.7 below. Even if there is no problem of Heteroskedasticity applied robust logistic regression in order to remove Heteroskedasticity to more confidence.

Table 4.6 Heteroskedasticity Test

Breusch-Pagan /Cook-Weisberg test for Heteroskedasticity	
Ho: Constant variance	
Variables: fitted values of Yi	
chi2(1)	0.94
Prob > chi2	0.3328

Stata Outcome, 2022

4.3.2 Logistic regression Analysis

Binary logistic regression is applied to identify the determinants of youth unemployment status which is dichotomous response variable, with the explanatory variable. STATA version 13 software is used to perform the binary logistic regression analysis. After post-estimation diagnostic test, the logit regression analysis result Table 4.8 shows as follows:-

Table 4. 7 Stata Logit Regression Analysis out Comes

Number of obs = 203, LRchi2 (13) 196.22, Prob > chi2 = 0.0000 and Pseudo R2 = 0.7050

Variable	Coefficient	Robust Std.Err	Marginal Effect	OR	Z	P> z	95% confidence interval	
Gender	4.42	1.46	.785	83.11	3.03	0.002**	1.55	7.28
Migration status	-1.19	0.66	-0.254	0.302	-1.80	0.071	-2.49	0.10
Job preference	10.31	2.09	0.955		4.30	0.000***	5.61	15.01
Accesses to social network	-2.25	0.05	-0.454	30156	-2.99	0.003**	-3.73	-0.77
Marital status	-5.59	1.12	-0.720	0.0037	-4.99	0.000***	-7.79	-0.77
Job training	-3.88	1.77	-0.539	0.204	-2.19	0.029**	-7.36	-0.40
Credit service	-2.42	0.82	-0.484	0.88	-2.94	0.003**	-4.035	-0.80
Household size	1.10	0.29	0.248	3.01	3.73	0.000***	0.52	1.68
Work experience	-0.23	0.10	-0.052	0.793	-2.23	0.026**	-0.43	-0.28
Parental education	-0.20	0.098	-0.046	0.811	-2.12	0.034**	-0.40	-0.01
Education level	-0.22	0.89	-0.051	0.795	-2.57	0.010**	-0.40	-0.05
Age	-0.36	0.16	-0.819	0.694	-2.22	0.026**	-0.68	-0.04
Household income	-0.0009	0.0003	-0.0021	0.999	-3.23	0.001**	-0.0015	-0.0004
Constant	10.39			32678				

Note the stars symbol ***,**and * indicates 1% ,5% and 10% level of significance respectively.

Source: STATA result 2022,

$$Y_i \frac{P_i}{1 - P_i} = B_0 + B_1 AGE + B_2 MRS + B_3 MIG + B_4 HHI + B_5 HHS + B_6 AC + B_7 ASN + B_8 JP + B_9 JT + B_{10} GEN + B_{11} WE + B_{12} EDU + B_{13} PEDU + U_i$$

$$Y_i = 10.39 + 4.42\text{GEN} - 0.36\text{AGE} - 0.22\text{EDU} - 5.59\text{MRS} - 0.0009713\text{HHI} - 2.25\text{ASN} - 1.19\text{MIG} + 1.10\text{HHS} + 10.31\text{JP} + 0.20\text{PEDU} - 0.23\text{WE} - 2.42\text{AC} - 3.88\text{JOBT}$$

4.3.3. Interpretation and discussion of significant of model out come

Out of 13 explanatory variables in the model 12 significance at 1% and 5% level of significance but 1 variable migration status at 5% level of insignificance and at 10% significance .

Based on the regression result Table 4.8 interpreted as follow Pseudo $R^2 = 0.7$ there for the values indicates that the model is good and explains 70% of variations in the model.

Over all significance of the model : LR spastics equivalents to F-test in the linear regression model .based on LR test spastics result of the model is LR Chi2(13)=196.22 and Prob>Chi2=0.0000 .therefore the model is over all significant. $\beta_0 = 10.3944$, meaning that constant or intercepts of the model.

The variables basically used sign of coefficients, marginal effects and odds ratio results but some literature review advice inter prate using more poplar ways of marginal effects results than odds ratio and the coefficient indicates the direction or positive and negative relationship with the dependent variable.

Marital Status: (Coefficient= -5.595, P-value= 0.000, OR = 0.0037, Marginal effect= 0.72) was included in the model to identify whether there is a difference in unemployment status of the respondents. Marital status has strongly and statically significant at 1% level of significance and negatively affects on dependent variables. From the estimated marginal effects result implies that keeping other factors constant unmarried youths as individuals compared with married youths were about 72 % less likely to be unemployed. In other words married youths more likely to be unemployed than unmarried youth. The study contradicts with the findings of Amenu Leta Duguma and Fufa Tesfaye (2019).

Accesses to social network : it is important explanatory variable in the model since in order to get relevant information about job opportunity and stands for youths accesses to social network has negatively and statically significant affect on youth unemployment status at,5 percent level of significance with the coefficient of -2.2541 the estimated marginal effect result -0.4548 this implies that keeping other factors remain constant as individuals were youth had accesses to

social network 45% less likely to be unemployed compared with youths had no accesses to social network. in other words the result indicates had no better accesses to social network as individuals more likely to be unemployed .youths who have weak social network have increases the probability of being unemployed than youths who have better social networks . Weak social networks led to high risk of unemployment. The findings similar with the findings of Tsegaw Kebede Tegegne (2019).

The Variable Gender (Female): in the model gender was founds important explanatory variable of the unemployment status of individuals. Gender was positively and statically significant at 5% level of significance. The logit regression results indicate the coefficient, marginal effects and odds ratio 4.42, .7852 and 83. respectively .interpretation for gender based on estimated marginal effects the shows that keeping other factors constant, females as individuals were 78.52% more likely to be unemployed than males. or keeping other things given constant ,being female increases the probability of being unemployed by 78.52% relatively the male youths on average .the findings contradicts with the findings of Tsegaw Kebede Tegegne (2019) determinants of urban youth unemployment in the case of Guder town .

Accesses to Credit: the theory says increasing the availability of credit service to the youth reduces un employment and increases the efficiency and volume of self-employment which in turn creates more job opportunity and a decreases the chance of un employment .the binary logit regression analysis coefficient result shows that an access for formal credit has negative and a significant factors that determine the unemployment status of the youths. thus taking the youths having no access to credit as a reference category (0) and the coefficient of variable access for credit is found to be -2.421836 and the log odds for the youth being 0 .0887585 and estimated marginal effect result also -0.4843885 indicates and interpreted as individual has accesses to credit were 48.4%less likely to be unemployed compared to those have no accesses to credit. In other words accesses to credit service inverse relation with the dependant variable. This proves the theory. the findings similar with the findings of Tsegaw Kebede Tegegne (2019).

Migration Status: one of the variables of the model is migration status of the youth and the coefficient -1.194498 and the marginal effect -.2549428. Migration status has negative and statically significant at 10% level of significance. Keeping other factors constant as individual

non-migrant youths 25.4% less likely to be unemployed when compared with migrant youths. The logit model predicts that if individuals were non migrants their unemployment status decreases by the odds ratio of 0.3028561 compared to migrants or in other words as individual were non migrants less likely to be unemployed than those migrants youths. This is similar with the findings of Ahmed Teyib Kemal determinants of urban youth unemployment in the case of Adama city (2020).

Job preference: the other variables of the model are job preference and has positive and which has strongly statically significant affect on unemployment status of the youth at 1 percent level of significance. The logit regression coefficient has 10.31415 and the estimated marginal effect result 0.9558792 and odds ratio 3.015625. This indicates that keeping other factors constant as individual youth that preferred paid job 95% more likely to be unemployed compared with youths prefers jobs self-employment .in other words paid job prefers has positive relation with the dependent variable. based on the logit odds ratio the youth being unemployed increases by 3.01 times than that of preferred self -employment or the likelihoods of being unemployed for those respondents who preferred paid employment job more likely than compared to those who preferred self-employment .or as individuals preferred paid employment job more likely to unemployed than self -employment preferred . These ; findings similar to the findings of Ahmed Teyib Kemal determinants of urban youth unemployment in the case of Adama city (2020).

Job Training: job training is other variables in the model and individuals to improve their skills and professionally in order to adjust themselves to the labor market demand. as the logit regression result shows that the coefficients -3.887434. This indicates that job training has negative effects and significant at 5 percent level of significant on youth unemployment. the estimated marginal effect result also indicates that -0.5398 meaning that youths who had received some sort of training was 53.9% less likely to be unemployed compared with youths who did not received job training keeping other factors constant. These results similar with the findings of

The Variable Age: the logit coefficient of age is found to be -0.3640011. Age has negatively affects youth unemployment at, 5 percent level of significance and within the limited age

boundary (15-29) which is youth population in Ethiopian context. Based on logit regression coefficient, odds ratio and the estimated marginal affects, the result shows that keeping other factors constant as individuals of the age of the youths increase by one year 8.19% less likely to be unemployed .since the younger youths are more vulnerable for unemployment than the older youths. The regression coefficient shows that for a one year increase in the age of youths, the logs of odds in favor of being unemployed was be reduced by a 0.6948. Or in other words one year increase age, odds ratio towards unemployment decrease by 0.6948. that means given the age boundary, as age increases the probability of being unemployed decrease .or as individual age were increases the probability being unemployed decrease. it is similar to the findings of Aynalem Shita and Mulugeta Dereje (2018) determinants of urban youth unemployment East Gojjam .

Educational level: stands for the educational level of the youth, based on the logit regression analysis result education level of the youth and unemployment were negatively related and statistically significant effect on unemployment status of the youth at 5 percent level of significance. With the coefficient of -0.2291223, keeping other factors remain constant increase youth education of year of schooling the probability of being unemployed decrease by 5.15%. in other words thus we would predict that the log odds for the youth being employed increases by 0.7952313 for every one year increment in the educational level of the youth. Since that the probability of getting education of youths is more likely to be employed.

Parental Education: stands for the educational level of the youth's parents, has a negative and statistically significant at 5 percent level of significance affects on unemployment status of the youth. The logit regression coefficient of -0.2083478, odds ratio 0.8119246 and the estimated marginal effect -0.04688 the result implies that as increase of parental education by one year of schooling, decreases probability of youth unemployment by 4.6% keeping all other variables constant. in other words keeping other factors remain constant, thus we would predict that the log odds for the youth being unemployed decreases by 0.8119246 for every one year increment in the educational level of the youth's parents . in other words as individual parental education level increases were less likely to youth unemployment .

Household Income: Stands for monthly income level of youth parents has negatively and statically significant affects on unemployment status of youths at 5% level of significance. With the logit regression result coefficient of -0.0009713 and the estimated marginal effect 0.0002186 and the odds ratio 0.9990292 respectively. this indicates that keeping other factors remain constant, Thus we would predict that the log odds for the youth being unemployed decreases by 0.9990292 for every one birr increment in the monthly household income or household incomes are less likely to have unemployed. Keeping other factors constant as individuals household income incensement for one birr in monthly the youth unemployment being decreased. Or as income of the youth's family increases, we expect the youth's likelihood of being employed also increases. This finding is consistent with the finding of Tsegaw Kebede Tegegne (2019) socio-economic determinants of youth unemployment, evidence from Ethiopia in the case of wolayta sodo town western Ethiopia zone The finding against Adamu Mulu Ketema et al.(2020) the determinants of urban unemployment in Ethiopia and Here the result indicates that the probability of having more income is more likely to be employed. And Amenu Leta Duguma, (2019) determinants of urban youth unemployment in the case of Guder town his finding also household income is insignificance.

Household Size: household size is one of the variable in the model and has negative and significantly affect o youth unemployment at, 5 percent level of significant. the binary logit regression result shows that in table 4.4 with the coefficient 1.103597 and the log odds ratio is found to be 3.014993 and the estimated marginal effect result also 0.248 . thus implies that every one unit increases in household size the log odds ratio 3.014993 times being unemployed increased .in other words as individuals were increase household size more likely to be unemployed .since household size and youth unemployment has positive relationship. Number of household family size increases where as youth unemployed also increased.

Work Experience: based on the hypothesized expectation of the researchers, work experience affects unemployment negatively at 5 percent significant level. the result also shows the variable work experience has the coefficient is found to be -.2313798 the estimated marginal effects result 0.0520696 and the odds ratio also 0.793438 this indicates that as individuals were other factors keeping constant work experience increases by one year 5.2% less likely to be unemployed. Work experience has negatively related to unemployment and statically significant at 5% level of significance.

CHAPTER FIVE: CONCLUSION AND RECOMENDATION

5.1. Introduction

The chapter is organized as follows start with introduction, conclusion, and recommendation and limitation of the study.

5.2. Conclusion

The main objective of this study is to identify the determinants of youth unemployment in woldia town. to achieve the objectives using descriptive and econometrics analysis approaches. Generally from the findings econometrics analysis result show that gender is significant determinants of youth unemployment and female youths stands a high chance of being unemployed compared with male youths.

Marital status and migration status also indicates the proportion of unemployed is higher in migrants and married youth's .this finding consistent with the findings of econometric analysis. in order to reduce unemployment size manly depends on which type of unemployment existed so, from the descriptive analysis most of the respondents faced fractional unemployment type. the study has unemployed binary logistic regression model the findings from the binary logistic regression model taking the unemployment status of the youth indicates that a total of 13 variables included in to the model that may affect youth unemployment were considered among them 13 of the variable gender, age, youth education level ,job preference ,household income, accesses to social network, parental education level ,marital status, job training ,household size and accesses to credit and work experience were found significant at 5 percent level of significant .while surprisingly the rest 1 variables migration status was statically insignificant to youth unemployment in the model at 5 percent level of significance but 10% slightly significant. as it hypothesized migration status, household size, gender and marital status of individuals affect their unemployment status positively at 5 percent level of significance. while the rest age, household income, accesses to credit, accesses to social network, job training, job

preference, education level of the youth, parental education and work experience hypothesized negatively affect on youth unemployment status at 5 percent level of significance. the result also proved that household size, gender and job preference has positively affects on youth unemployment at 5 percent level of significant. Whereas, The rest 9 variables negatively affects to the dependent variable (youth unemployment status).

5.3. Recommendation

Based on the findings of the study the following were recommended in order to decrease youth unemployment in study area woldia town.

- From the descriptive analysis out of the total unemployed respondents about 64 (71.9%) of respondents unemployment type is fractional government should be give effective strategies and policies for reducing unemployment depend on which type of unemployment you're targeting. For instance, the study area types of unemployment exists mainly fractional, cyclical and structural since to reducing fractional unemployment establishing computerized national job bank that would be provide job seekers and perspective employers with better information and implementation program .
- In this study migrants were more likely to be unemployed since the concerned bodies should be control rural to urban migration and reduce the gap between urban and rural area by increasing investment in rural area and improve the living conditions, create job opportunities and promote urban to rural migration.
- The findings show that as individual female youths were more likely to be unemployed where compared to male youths therefore, efforts made by the government and police makers should strength the laws and regulation relating gender balance in the labor market, the government also should be done female youth to empower them should further increases their participation through promoting opportunities for youth female and male.
- More integrated efforts needs to be exerted in promoting female related institutions and affirmative action's to enhance active participation and empowerment of female in the labor markets.
- The government should be take measures of action in order to support low household income families. It is important to develop community based innervations giving priority to

low household income families by using urban livelihoods program ,improve health ,education ,and credit facility service .and increasing income as well as wealth level of youths family needs to intervention from the concerned bodies that helps to reduce youth unemployment .

- For this study youths preferred paid jobs or in the government office this result shows as individuals paid job were more likely hoods of being unemployed. Therefore, should be done changing the social mindset of the youth towards job preference. The government ,NGO and youths parent should be create awareness to youths about the importance of self employment ,increase the availability of initial working capital using credit service ,choose profitable business area and provision of practical training for youths to be engaged at their own business .
- The government and NGOs should be emphasizing for youth training to promote employability. They give youth the opportunity to take advantage of job opportunities and income earning possibilities. Developing young people's employability is central to ensuring their successful transition to the labour market and their access to career-oriented employment. Youth need to acquire the skills, knowledge, competencies and attitudes that would allow them to find work and to cope with an unpredictable labour market. Generally the concerned bodies should be providing job training for youths.
- The government should be increase an access of credit service for youth in order to create and run self-employment (their own business), Provision of finance (in the form of credit)
- Training or education sectors must design their program according to the needs of the labour market since, the government and NGOs can provide training and consultancy services on how the youths can create and start their own private business (self-employment).
- Based on the study result shows that youth level of education matters for youth unemployment .therefore, polices makers should be review job market laws and regulation in order to promote smooth transition of youth from education to job labor market .
- The government should encourage the private sector to invest more in industries with high employment creation capacity through joint venture with those requiring huge investment albeit highly labor intensive, such as the urban agriculture investment, manufacturing and tourism sectors.

- Generally the task of fighting youth unemployment is cannot carry out the government alone, should be need connected effort from all actors /concerned bodies.
- Policymakers, Governments and NGOs should be considering not only the rate of unemployment but also the period of time that youths remain unemployed.

5.4. Limitation of the Study

The town where the study area is being conducted was destroyed by the invading forces of Tigray so, it faced difficult to get secondary data adequate information about the study area. Due to lack of willingness, some respondents did not give accurate or full information on some socio-economic characteristics or may not be available for question. But the researcher prepared additional questioners for contingent responses. There were some outliers for some determinant factors in data collecting process. Thus, the researcher dropped these questioner having outliers and substitute with the contingent questioners. Similarly the study faces challenges of coverage of the total population, because such type of study might be requires the consideration of large sample size. Beside the above limitations since the study is specified to a single town this may create some problem in generalizing the whole challenges of youth unemployment in the country level.

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APPENDIXES

APPENDEX . 1 Multicollinearity test

1. Correlation Matrix (obs=203)

GEN	AGE	MIG	EDU	JP	HHI	ASN	PEDU	MRS	WE	JT	HHs	ACS
-----	-----	-----	-----	----	-----	-----	------	-----	----	----	-----	-----

GEN	1.0000												
AGE	-0.4020	1.0000											
MIG	-0.2402	0.1623	1.0000										
EDU	-0.1197	-0.0486	0.1724	1.0000									
JP	0.0112	0.0116	0.0268	0.1260	1.0000								
HHI	0.0548	-0.2082	0.2440	0.2011	0.0929	1.0000							
ASN	-0.1040	0.0402	0.2252	0.3876	0.3261	0.1192	1.0000						
PEDU	0.1670	0.1066	-0.1138	-0.1245	-0.1848	-0.2194	-0.0415	1.0000					
MRS	-0.0374	-0.0906	-0.0839	0.0368	0.5542	-0.3358	0.1021	-0.2345	1.0000				
WE	0.0974	-0.0784	-0.0210	0.2214	-0.0411	0.0659	0.0456	0.0475	0.0224	1.0000			
JT	0.0112	-0.0523	-0.0674	0.0060	0.6726	-0.3266	0.1392	-0.1430	0.5542	-0.0187	1.0000		
HHs	-0.1046	0.0533	-0.1618	-0.1580	0.2139	-0.2354	-0.1389	-0.3527	0.4899	-0.1620	0.1899	1.0000	
ACS	-0.0168	0.1349	0.1562	0.3541	0.1801	0.1015	0.2706	-0.0879	0.1608	0.1805	0.0401	-0.0578	1.0000

APPENDIX 2. Variance Inflation Factors (VIF)

Variable	VIF	1/VIF
JP	3.51	0.284988
JT	2.88	0.347322
MRS	2.61	0.382682
HHI	2.39	0.418199
HHs	1.75	0.571551
AGE	1.56	0.639341
PEDU	1.47	0.681058
EDU	1.41	0.707415
ASN	1.41	0.709960
GEN	1.38	0.726134
ACS	1.32	0.759619
MIG	1.25	0.799900
WE	1.13	0.882690
Mean VIF	1.85	

APPENDEX 3. Goodness-of-fit test

Logistic model for youth unemployment, goodness-of-fit test

number of observations = 203

number of groups = 8

Hosmer-Lemeshow $\chi^2(8) = 3.74$

Prob > $\chi^2 = 0.8798$

APPENDEX 4. Heteroskedasticity Test

Breusch-Pagan / Cook-Weisberg test for Heteroskedasticity			
Ho: Constant variance			
Variables: fitted values of Yi			
$\chi^2(1)$	=	0.94	
Prob > χ^2	=	0.3328	

APPENDEX 5 Cameron & Trivedi's decomposition of IM-test

Source	χ^2	df	p
Heteroskedasticity	109.14	89	0.0724
Skewness	38.33	13	0.0003
Kurtosis	0.20	1	0.6571
Total	147.67	103	0.0026

Appendix 6. Ovttest Test

Ramsey RESET test using powers of the fitted values of Yi	
Ho: model has no omitted variables	
$F(3, 186)$	= 33.06
Prob > F	= 0.0623

APPENDIX 7. Summary Table

Variable	Obs	Mean	Std. Dev.	Min	Max
Yi	203	.4384236	.4974206	0	1
GEN	203	.2413793	.4289777	0	1
AGE	203	23.40887	4.364043	15	29
MIG	203	.4137931	.4937299	0	1
EDU	203	8.453202	4.3568	0	16
JP	203	.2364532	.4259541	0	1
HHI	203	2927.631	2762.013	1236	10000
ASN	203	.4384236	.4974206	0	1
PEDU	203	2.605911	3.33929	0	12
MRS	203	.2955665	.457425	0	1
WE	203	1.625616	3.122536	0	10
JT	203	.2364532	.4259541	0	1
HHS	203	4.344828	2.414746	0	10
ACS	203	.4433498	.4980085	0	1

APPENDEX 8. Classification Logistic model for Yi

(Sensitivity and Specificity) test

----- True -----

Classified	D	~D	Total
+	82	6	88
-	7	108	115
Total	89	114	203

Classified + if predicted $\Pr(D) \geq .5$

True D defined as $Y_i \neq 0$

Sensitivity	$\Pr(+ D)$	92.13%
Specificity	$\Pr(- \sim D)$	94.74%
Positive predictive value	$\Pr(D +)$	93.18%
Negative predictive value	$\Pr(\sim D -)$	93.91%
False + rate for true ~D	$\Pr(+ \sim D)$	5.26%
False - rate for true D	$\Pr(- D)$	7.87%
False + rate for classified +	$\Pr(\sim D +)$	6.82%
False - rate for classified -	$\Pr(D -)$	6.09%
Correctly classified		93.60%

APPENDIX 9 Proportion Estimation

proportion Yi GEN AGE MIG EDU JP HHI ASN PEDU MRS WE JT HHs ACS

Number of obs= 203

Proportion	Std. Err.	[95% Conf. Interval]		
Yi				
employed	.5615764	.0349121	.4919922	.62882
unemployed	.4384236	.0349121	.37118	.5080078
GEN				
Male	.7586207	.0301083	.6944331	.8129567
Female	.2413793	.0301083	.1870433	.3055669
AGE				
15	.0541872	.0159285	.0301073	.0956274
16	.0591133	.0165934	.0337113	.1016427
17	.0591133	.0165934	.0337113	.1016427
18	.0591133	.0165934	.0337113	.1016427
20	.0049261	.0049261	.000682	.0346655
21	.0591133	.0165934	.0337113	.1016427
23	.0591133	.0165934	.0337113	.1016427
24	.2364532	.0298961	.1826149	.3003319
26	.1773399	.0268743	.1303697	.2366281
28	.1182266	.0227175	.0802457	.1708449
29	.1133005	.0223012	.0761979	.1652378
MIG				
migrant	.5862069	.034653	.516649	.6524878
nonimmigrant	.4137931	.034653	.3475122	.483351
EDU				
0	.044335	.0144827	.0230983	.0834293
4	.2068966	.0285014	.1562737	.2686956
5	.0788177	.0189587	.0486426	.1252474
6	.0591133	.0165934	.0337113	.1016427
7	.0591133	.0165934	.0337113	.1016427
8	.1477833	.0249696	.1049853	.2040505
9	.0246305	.0109055	.0102122	.0582085
10	.0049261	.0049261	.000682	.0346655
12	.2167488	.0289903	.1650088	.2792859
14	.0197044	.0097788	.0073533	.0517202
15	.0738916	.0184057	.044842	.1194075
16	.0640394	.0172257	.037372	.107608
JP				
self-employment	.7635468	.0298961	.6996681	.8173851
paid job	.2364532	.0298961	.1826149	.3003319
HHI				
1236	.1773399	.0268743	.1303697	.2366281
1254	.1773399	.0268743	.1303697	.2366281
1256	.0591133	.0165934	.0337113	.1016427
1478	.1182266	.0227175	.0802457	.1708449
1500	.1034483	.0214276	.0681773	.1539517
1587	.0591133	.0165934	.0337113	.1016427
2000	.0098522	.0069493	.0024364	.0389586
2300	.0049261	.0049261	.000682	.0346655

3600		.0049261	.0049261	.000682	.0346655
4500		.0049261	.0049261	.000682	.0346655
4569		.0541872	.0159285	.0301073	.0956274
4897		.0541872	.0159285	.0301073	.0956274
5269		.0591133	.0165934	.0337113	.1016427
7071		.0049261	.0049261	.000682	.0346655
9563		.0591133	.0165934	.0337113	.1016427
10000		.0492611	.0152267	.0265668	.089558
ASN					
nonsocial		.5615764	.0349121	.4919922	.62882
has social		.4384236	.0349121	.37118	.5080078
PEDU					
0		.4729064	.0351282	.4045947	.5422478
1		.0591133	.0165934	.0337113	.1016427
2		.0591133	.0165934	.0337113	.1016427
4		.1724138	.0265777	.1261001	.2312365
5		.1182266	.0227175	.0802457	.1708449
7		.0541872	.0159285	.0301073	.0956274
12		.0640394	.0172257	.037372	.1076085
MRS					
married		.7044335	.0321049	.6374833	.7636043
non married		.2955665	.0321049	.2363957	.3625167
WE					
0		.5812808	.0347119	.5117042	.6477677
1		.1428571	.0246208	.100813	.1985638
2		.0689655	.0178288	.0410838	.1135289
3		.0788177	.0189587	.0486426	.1252474
4		.0197044	.0097788	.0073533	.0517202
5		.0147783	.0084899	.0047283	.0452193
6		.0098522	.0069493	.0024364	.0389586
7		.0147783	.0084899	.0047283	.0452193
8		.0147783	.0084899	.0047283	.0452193
10		.0049261	.0049261	.000682	.0346655
12		.0295567	.0119162	.0132476	.0646288
13		.0147783	.0084899	.0047283	.0452193
16		.0049261	.0049261	.000682	.0346655
JT					
non trained		.7635468	.0298961	.6996681	.8173851
trained		.2364532	.0298961	.1826149	.3003319
HHs					
0		.0295567	.0119162	.0132476	.0646288
2		.2561576	.0307127	.2003896	.3212112
3		.1871921	.0274449	.1389514	.2473694
4		.1133005	.0223012	.0761979	.1652378
5		.0689655	.0178288	.0410838	.1135289
6		.1773399	.0268743	.1303697	.2366281
7		.0394089	.0136896	.0197123	.0772355
8		.0591133	.0165934	.0337113	.1016427
9		.0295567	.0119162	.0132476	.0646288
10		.0394089	.0136896	.0197123	.0772355
ACS					
no accesses		.5566502	.0349533	.487081	.6240663
has accesses		.4433498	.0349533	.3759337	.512919

Appendix 10 Logistic regression

Logistic regression				Number of obs	=	203
				LR chi2(13)	=	196.22
				Prob > chi2	=	0.0000
Log likelihood = -41.055221				Pseudo R2	=	0.7050
Yi	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
GEN	4.420226	1.391432	3.18	0.001	1.693069	7.147384
AGE	-.3640011	.1177343	-3.09	0.002	-.5947561	-.1332461
MIG	-1.194498	.6535995	-1.83	0.068	-2.475529	.0865338
EDU	-.2291223	.0793348	-2.89	0.004	-.3846157	-.0736289
JP	10.31415	2.105658	4.90	0.000	6.187133	14.44116
HHI	-.0009713	.0002385	-4.07	0.000	-.0014387	-.0005038
ASN	-2.254145	.7272873	-3.10	0.002	-3.679602	-.8286879
PEDU	-.2083478	.1045714	-1.99	0.046	-.413304	-.0033915
MRS	-5.595332	1.415773	-3.95	0.000	-8.370196	-2.820468
WE	-.2313798	.1713295	-1.35	0.177	-.5671794	.1044197
JT	-3.887434	1.385054	-2.81	0.005	-6.60209	-1.172778
HHs	1.103597	.2523494	4.37	0.000	.6090017	1.598193
ACS	-2.421836	.8230684	-2.94	0.003	-4.03502	-.8086514
_cons	10.39447	3.384618	3.07	0.002	3.760744	17.0282

APPENDEX 11. Marginal effect Test (mfx)

$y = \Pr(Y_i) \text{ (predict)} = .34201038$

variable	dy/dx	Std. Err.	z	P> z	[95% C.I.]	X
GEN*	.7852594	.1047	7.50	0.000	.580056 .990463	.241379
AGE	-.0819145	.04152	-1.97	0.049	-.163291 -.000538	23.4089
MIG*	-.2549428	.1339	-1.90	0.057	-.517391 .007505	.413793
EDU	-.0515615	.02036	-2.53	0.011	-.091471 -.011652	8.4532
JP*	.9558792	.02536	37.69	0.000	.906174 1.00558	.236453
HHI	-.0002186	.00008	-2.75	0.006	-.000374 -.000063	2927.63
ASN*	-.4548767	.12879	-3.53	0.000	-.707308 -.202445	.438424
PEDU	-.0468864	.02307	-2.03	0.042	-.092095 -.001678	2.60591
MRS*	-.720957	.09452	-7.63	0.000	-.906219 -.535695	.295567
WE	-.0520696	.02511	-2.07	0.038	-.101292 -.002847	1.62562
JT*	-.5398092	.17651	-3.06	0.002	-.885771 -.193847	.236453
HHS	.2483528	.07894	3.15	0.002	.093634 .403071	4.34483
ACS*	-.4843885	.1531	-3.16	0.002	-.784467 -.18431	.44335

APPENDEX 12. Binary Logistic regression Results

(odds ratio)

logistic Yi GEN AGE MIG EDU JP HHI ASN PEDU MRS WE JT HHS ACS, vce(robust)

Number of obs = 203

Wald chi2(13) = 57.79

Prob > chi2 = 0.0000

Log pseudo likelihood = -41.055221

Pseudo R2 = 0.7050

Robust						
Yi	Odds Ratio	Std. Err.	z	P> z	[95% Conf. Interval]	
GEN	83.11509	121.3809	3.03	0.002	4.748854	1454.692
AGE	.6948904	.1138858	-2.22	0.026	.5039793	.9581201
MIG	.3028561	.2004661	-1.80	0.071	.082758	1.108313
EDU	.7952313	.0710303	-2.57	0.010	.6675193	.9473774
JP	30156.25	72281.63	4.30	0.000	274.8711	3308458
HHI	.9990292	.0003007	-3.23	0.001	.9984401	.9996186
ASN	.1049633	.0791914	-2.99	0.003	.023924	.4605128
PEDU	.8119246	.0798923	-2.12	0.034	.6695124	.9846294
MRS	.0037152	.0041649	-4.99	0.000	.0004128	.0334358
WE	.793438	.082265	-2.23	0.026	.6475287	.9722255
JT	.0204979	.0363838	-2.19	0.029	.0006322	.664653
HHS	3.014993	.8922574	3.73	0.000	1.688035	5.385065
ACS	.0887585	.0730966	-2.94	0.003	.0176688	.4458739
_cons	32678.55	147430	2.30	0.021	4.721141	2.26e+08

APPENDEX 13.Binary Logit regression Results

(logs of odds ratio)

Number of obs = 203

LR chi2(13) = 196.22

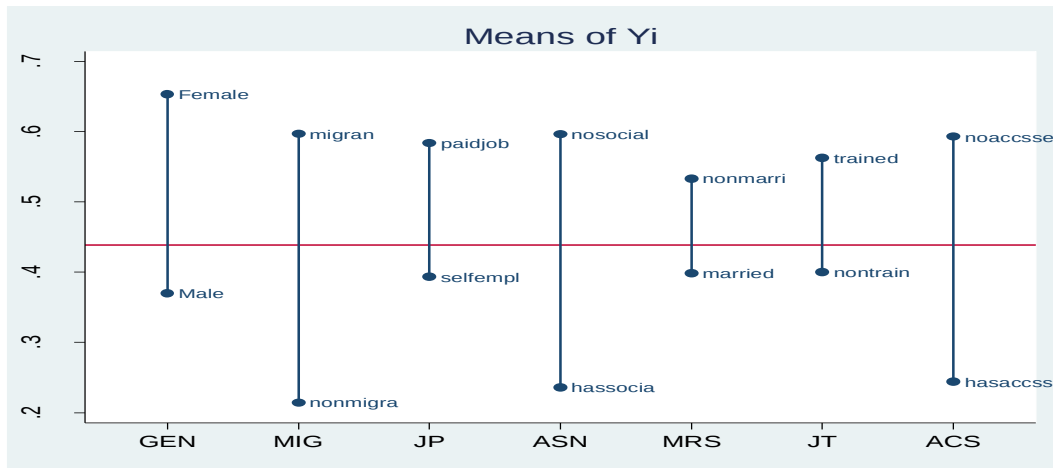
Prob > chi2 = 0.0000

Log likelihood = -41.055221

Pseudo R2 = 0.7050

Robust						
Yi	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
GEN	4.420226	1.460396	3.03	0.002	1.557903	7.282549
AGE	-.3640011	.1638902	-2.22	0.026	-.6852201	-.0427822
MIG	-1.194498	.6619188	-1.80	0.071	-2.491835	.1028394
EDU	-.2291223	.0893203	-2.57	0.010	-.4041869	-.0540577
JP	10.31415	2.396904	4.30	0.000	5.616302	15.01199
HHI	-.0009713	.0003009	-3.23	0.001	-.0015611	-.0003814
ASN	-2.254145	.754468	-2.99	0.003	-3.732875	-.7754147
PEDU	-.2083478	.0983986	-2.12	0.034	-.4012055	-.01549
MRS	-5.595332	1.121042	-4.99	0.000	-7.792535	-3.398129
WE	-.2313798	.1036817	-2.23	0.026	-.4345922	-.0281675
JT	-3.887434	1.775004	-2.19	0.029	-7.366377	-.4084902
HHS	1.103597	.2959401	3.73	0.000	.5235654	1.683629
ACS	-2.421836	.8235441	-2.94	0.003	-4.035953	-.8077191
_cons	10.39447	4.511524	2.30	0.021	1.55205	19.2369

APPENDIX 14. Means of Yi With Categorical Variables



Appendix 15 Expected and actual results of explanatory variables

Explanatory variables	Expected sign	Actual Result	Statically significant test	Hypothesis Test
Gender	+	Positive	5%	Accepted
Age	-	Negative	5%	Accepted
Migration status	-	Negative	10%	Accepted
Education level	-	Negative	5%	Accepted
Job preference	+	Positive	1%	Accepted
Household income	-	Negative	1%	Accepted
Social network	-	Negative	5%	Accepted
Parental education	-	Negative	5%	Accepted
Marital status	+	Negative	5%	Accepted
Work experience	-	Negative	5%	Accepted
Job training	-	Negative	5%	Accepted
Household size	+	Positive	1%	Accepted
Credit service	-	Negative	5%	Accepted

APPENDEX 12 Questioners

Determinants Of Youth Unemployment In Woldia Town

WOLDIA UNIVERSITY

FACUALITY OF BUSINESS AND ECONOMICS

DEPARTMENT OF ECONOMICS

Dear Sir/ Madam

My name is Nebro Hailu Kebede. I m undertaking a study on the Determinants of Youth Unemployment in your area

I kindly request that, you answer these simple questions honestly. The information you give is strictly for academic purposes only and was be trusted with maximum confidentiality

Instruction.

You are not supposed to write your name

Your response should be confidential

Please tick (✓) in the box according to your choice explain or circulate letter of your choice

Thank you for your advancement

Section - I: Demographic Information of Respondents

1. Sex Male ☐ Female ☐

2. What is your age?

3. What is your current marital status? Married ☐ Non-married ☐

4. Where did you born in this town? Yes ☐ No ☐

5. If your answer for question number 4 is no, how long have you been here? and

6. Why did you come to the town? Look for jobs Schooling/Others

Section -II Socio-Economic and other characteristics Information of Respondents

7. Can you read and write? Yes No

8. If you're answer for question number 6 is yes, what is your grade that you have? -----

What number of years you attended? -----

9. Have you received any TVT training /job training in any government or private institutions?

Yes No

11. If your answer for question 8 is yes, are you working by the training you received?

Yes No

12.. What is your employment status currently? Employee . Unemployed

13. . If your answer question number 10 is unemployed, how long have you been unemployed?

14.. Did you have employment before? Yes No

15. . If your answer question number 12 yes what causes your unemployed? -----

16. . Are you trying to change Jobs? Yes No

17. . Are you currently unemployed because you are trying to changes your job? Yes No

18. How many members are there in the household you live? -----

19. . What is the total monthly income of your HHs in birr? -----

20. Have you had accesses of credit if you want to start a business? Yes No

21. What is the education back ground of your parents?

22. Have you worked? Yes NO

23. If question number 21 answer is yes how long done you work? -----

24. Do you have an access for social network or contacts with other people who share you information about job? Yes ☐ No ☐

25. What type of work do you prefer? Paid job ☐ Self-employment ☐

26. Why you are unemployed ? A/ Voluntarily Leaving Job B/ Finishing School Recently C/ Skill not Matching with Job Requirement D/ No Demand for labor force E/ School Dropout

III: Focus group discussion guidelines

1. How is the risk of youth unemployment in the town?-----

2. Are there any job opportunities available for youth in the town?-----

3. What are the factors that are responsible for the youth unemployment?-----

4 Is there any measure taken to reduce the problem of youth unemployment in the town by the concerned body?-----

5. Who are more unemployed in gender status male or female? -----

6. If female or Male Why?-----

7 .What measures do you think successful to minimize the risk of youth unemployment in the town?-----

8. What type of work (self-employment or paid job) is more preferred by youth? -----

9. Have you credit access on the town?-----

10. What are problems related to access of formal credit for youths?-----

Section IV: Solution for youth unemployment of Respondents

11. What do you think that the most appropriate solution to reduce youth unemployment in as
woldia town? -----

12. Do you think, reducing youth unemployment is the responsibility of youth's them-selves? --

13. Do families and religious institution have a role in reducing unemployment among youth in
this area?-----

